U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

SEARCH REQUEST FORM

Requestor's Name:		Serial Number:	
Date:	Phone:	Art Unit:	
that may have a special meaning	of search topic. Describe specifically as p Give examples or relevant citations, authay include a copy of the broadest and/or	ors keywords, etc., if known. For sequ	
	STAFF USE O	NI V	
Date completed: 06 -			S
•••••	-4 e4977	STIC	_ IG Suite _ STN
Elapsed time:		Pre-S	_ Dialog
CPU time:	Type f		_ APS
	3	N.A. Sequence	Geninfo
Number of Searches: Number of Databases:		A.A. Sequence	SDC DARC/Questel
rumoci di Dalabases		Judiciuic	Other CGN

PTO-1590 (9-90)

USCOMM-DC 90-3952

THIS PAGE BLANK (USPTO)

Sequence 2363, App Sequence 20, Appl Sequence 6, Appli Sequence 393, App Sequence 7198, Ap

Title: Perfect score:

Sequence:

OM nucleic

Run on:

Scoring table:

Searched:

8 0 0 0 0

imum. Maximum Database

```
APPLICANT: Phippard, Deborah
APPLICANT: Vasanthakamur, Geetha
APPLICANT: Vasanthakamur, Geetha
APPLICANT: Deboron, Stanton
APPLICANT: Ma, Xiao-Jun
TITLE OF INVENTION: Osteoarthritis tissue-derived nucleic acids, polypeptides,
TITLE OF INVENTION: Octoors, and cells
FILE REFERENCE: SO-3221 PR
CURRENT APPLICATION NUMBER: US/09/765,231A
CURRENT FILING DATE: 2001-01-18
SEQ ID NOS: 82
SEQ ID NOS: 82
LENGTH: 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATTGGTTTTTACCTTCAGAAGAATATTTAGTTTTCACTCAGGTTTTTCAAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCCCAAAAAACGAAACAAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 TCCCCCAAAAAGGAAACAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 225; DB 10; Best Local Similarity 100.0%; Pred. No. 1.5e-50; Matches 225; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                            US-09-960-352-10867
US-10-198-846-5458
                                       US-09-925:301-393
US-10-198-846-7198
US-09-754-853A-11
US-09-754-853A-22
US-09-754-853A-23
US-09-754-853A-12
US-09-754-853A-13
US-09-754-853A-14
US-09-754-853A-14
US-09-754-853A-15
US-09-754-853A-15
US-09-754-853A-15
US-09-754-853A-17
                                                                                                                                                                                                                                                                                                       US-08-781-986A-61
US-10-078-090-112
US-10-074-095-207
US-09-764-860-207
                                                                                                                                                                                                                                                                                                                                                                  US-10-196-063-1
                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 58, Application US/09765231A Patent No. US20020119452A1 GENERAL INFORMATION:
APPLICANT: Searle/Monsanto
                                        TYPE: DNA
CORGANISM: Homo sapiens
US-09-765-231A-58
JS-09-765-231A-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Appli
Sequence 772, App
Sequence 1661, Ap
Sequence 4564, Ap
Sequence 104, App
Sequence 106, App
Sequence 11080, App
Sequence 11188, A
Sequence 98, Appl
Sequence 577, App
Sequence 177, App
Sequence 13, Appl
Sequence 80, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 58, Appl
Sequence 1, Appli
                                                                                               9, 2003, 08:36:49 ; Search time 539 Seconds (without alignments) 584.222 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                   CGT2 6/ptodata1/pubpna/USO7 PUBCOMB.seq:*

(GGT2 6/ptodata1/pubpna/DGT NEW PUB.seq:*

(GGT2 6/ptodata1/pubpna/USO6 NEW PUB.seq:*

(GGT2 6/ptodata1/pubpna/USO6 NEW PUB.seq:*

(GGT2 6/ptodata1/pubpna/USO6 NEW PUB.seq:*

(GGT2 6/ptodata1/pubpna/USO8 NEW PUB.seq:*

(GGT2 6/ptodata1/pubpna/USO8 NEW PUB.seq:*

(GGT2 6/ptodata1/pubpna/USO8 PUBCOMB.seq:*

(GGT2 6/ptodata1/pubpna/USO8 PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                           1740770
             GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-770-791-772

US-09-880-107-1661

US-09-981-965-4454

US-09-917-265-104

US-09-917-265-106

US-10-198-846-10020

US-10-198-846-10020

US-10-198-846-12188

US-09-986-480-98

US-09-9813-153-29

US-09-9813-153-29

US-09-9813-153-29

US-09-980-13

US-09-980-13

US-09-373-658-33

US-10-175-523-80

US-10-175-523-80
                                                                                                                                                                                                                                                                                      nl number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                              870385 segs, 699768693 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                         Applications NA:
                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                       nucleic search, using sw model
                                                                                                                                                                                                                  IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 П
                                                                                                                                                                                                                                                                                                                     seq length: 0
seq length: 200000000
                                                                                                                                                     US-09-765-231A-58
225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              225
640681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3161
                                                                                                                                                                                                                                                                                                                                                                                                                            Published
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           June
```

ò

Gaps

ö

9 9 120 120 180 180

> 225 225

TIGHT

181 181

셤 ò

824 30601 90650 584

450700

Result õ

Sequence 61, Appl Sequence 112, App Sequence 207, App Sequence 207, App Sequence 1, Appli

Sequence 14, Appl Sequence 15, Appl Sequence 16, Appl Sequence 17, Appl Sequence 2, Appli Sequence 10867, Appli Sequence 10867, Appli

Appli

Sequence Seq

```
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-770-791-772
                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
                              INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                        16.6%;
53.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        An, Yong-Qiang
Hamilton, Carol M.
Price, Jennifer L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ledford, Brooke L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 u, Yang
ameaka, Joshua G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Garcia, Carlos A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Raines, Tracy M.
                                                                                                                         TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: 13177
                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 53.03
Matches 80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      age, Amy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kricker,
                 TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -09-770-791-772/c
                                                                                                                                                                                                                     US-10-072-130-2
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                             음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   198302 AATCAAATTAATAAACTAGTATATTTTCAATTATGACTTTTCAATAATTTTTATTATTAAG 198243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32 AAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTTACCTTCAGAAGAATATTAG
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                         Length 640681;
                 APPLICANT: HATORI, MASAHIRA
APPLICANT: HATORI, MASAHIRA
TITLE OF INVENTION: GENOME DNA OF BACTERIAL SYMBIONT OF APHIDS
FILE REPERENCE: 081356/0159
CURRENT APPLICATION NUMBER: US/09/790,988
CURRENT FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: JP2000 .
                                                                                                                                                                                                                                                                                                                                                                                                                            58; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: DOS SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                           DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Corley, Neil C.
Zhang, Hong
TITLE OF INVENTION: NEW PROTEIN PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 19;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/072,130
FILING DATE: 05-Feb-2002
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/873,093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/10072130
Patent No. US20020173022A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bandman, Olga
Goli, Surya K.
Lal, Preeti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198182 AAGATTTTTA 198172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diske
                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                       Query Match 17.0
Best Local Similarity 55.7
Matches 73; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               152 AACCTTTTAA 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Buchnera sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: CA
                                                                                                                                                                                                                                                        SOFTWARE: Patent
SEQ ID NO 1
LENGTH: 640681
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
US-10-072-130-2/c
                                                                                                                                                                                                                                                                                                                                                   US-09-790-988-1
Sequence
```

g

용 ç

ò

```
2195 TTGACATACATTTTGATGTGTGTRGTTAGGCTATACAGAATATACAAACCAAAGCTGTAT 2136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2135 GAATAATACATAGGTTTTTCAAAAGTTATGTTTCATAAAGAATACAGAGAAAGGAAAAT 2076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29 TTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APDLICANT: Hoffman, Welth
APPLICANT: Hoffman, Welt
APPLICANT: Hurban, Patrick
TITLE OF INVENTION: Expressed Sequences of Arabidopsis
FILE REFERENCE: 2029 (PAPA-ANALLY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2075 AGCCACACATCCCAATATCTCACAACTTCTAA 2045
                                                                                                                                                                                                                                                                                                                                                                            Score 37.4; DB Pred. No. 2.9; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149 AACAACCTTTTTAAGAGTTGATGGCTACTCA 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 999
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 772
LENGTH: 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/770,791
CURRENT FILING DATE: 2001-01-26
                                                                                                                                                                                                                                                                         CLONE: THPIPLB01
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/178,480 PRIOR FILING DATE: 2000-01-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 772, Application US/09770791 Patent No. US20020062014A1
TELECOMMUNICATION INFORMATION TELEPHONE: 415-855-0555
                                                                                                                          LENGTH: 2268 base pair
                                              415-845-4166
```

```
49 AAAAGTACCT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: BOS taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
US-09-983-965-4454/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                128 AAAAACGAAACAAAACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        834 AGAAAAGAAACAAACAAACAAATCGACCCTTTAATTATTACTTGCAACTCAACAGATCT 893
                                                                                                                                                                                                                                            72 ACCTICAGAAGAATATITAGITICACICAGGITITICAAAGCIACGCIGICCCCCAAAAA 131
                                                                                                                                                                                    155 TGTATTACCTAAGACAATAAATATGATTTATGAATAAAACTAATTTGAATTACTGCATAT 96
                                                                                                                                                                                                                                                                                                        95 GAAATTATAAATCTTTTGTTTTAATCTCAAGATGTAATAATTTATGATCTTCACATAAAA 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4260, Application US/10198846

Publication No. US2003009974A1

GENERAL INPORMATION:

APPLICANT: Lillie, James

APPLICANT: Lillie, James

APPLICANT: Stelhmann, Kathleen

APPLICANT: Stelhmann, Kathleen

TITLE OF INVENTION: POR IDENTIFICATION, ASSESSMENT, PREVENTION, AND

TITLE OF INVENTION: THERAPY OF BREAST CANCER

FILE REFERENCE: MRI-049

CURRENT APPLICATION NUMBER: US/10/198,846

CURRENT FILING DATE: 2002-07-18

PRIOR APPLICATION NUMBER: 60/306,220
                                                                                                                         12 TGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTT
                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gequence 1661, Application US/09880107

Lent No. US20020142981A1

ENERAL INFORMATION:
APPLICANT: Horne, Darci T.
APPLICANT: Gener, Uwe.
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer;
TITLE OF INVENTION Gene Expression Profiles in Liver Cancer;
TITLE OF INVENTION Gene Expression Profiles in Liver Cancer;
TITLE OF INVENTION Gene Expression Profiles in Liver Cancer;
TITLE OF INVENTION Gene Expression Profiles in Liver Cancer;
TITLE OF INVENTION Gene Expression Profiles in Liver Cancer;
TITLE OF INVENTION UNMBER: US/09/880,107
CURRENT PILING DATE: 2000-06-14
PRIOR FTLING DATE: 2000-06-14
PRIOR FTLING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Genbank Accession No. US20020142981A1 D45288
US-09-880-107-1661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 16.2%; Score 36.4; DB 10; Length 1479; Best Local Similarity 61.7%; Pred. No. 4.5; Matches 58; Conservative 0; Mismatches 36; Indels 0;
Query Match
Best Local Similarity 53.5%; Pred. No. 2.5;
Matches 76; Conservative 0; Mismatches 66; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   188 GCCTCCTCTGCTGAATCAATTAGGAATTTTTT 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           894 cécreceracrecerrereagaacriracri 927
                                                                                                                                                                                                                                                                                                                                                                132 ACGAAACAAACAAAAAAAA 153
                                                                                                                                                                                                                                                                                                                                                                                                                           35 AAAAAAAAAAAAAAAAAA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
US-10-198-846-4260/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                              셤
                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
Sequence 4554, Application US/09983965

Sequence 4554, Application US/09983965

Patent No. US20020137160A1

GENERAL INPORMATION:

APPLICANT: Warren, Weeley C.

APPLICANT: Byatt, John C.

APPLICANT: Byatt, John C.

APPLICANT: MISSINGER AND FAT DEPOSITION

TITLE OF INVENTION: MUSCLE AND FAT DEPOSITION

TITLE OF INVENTION WIMBER: US/09/983,965

CURRENT APPLICATION NUMBER: US 60/113,678

PRIOR FILING DATE: 1999-12-15

PRIOR FILING DATE: 1999-12-17

NUMBER OF SEQ ID NOS: 5912

LENGTH: 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    169 AATTTAGCTANATTTATCTTNTCAATCAAATTCTACTTCAGAGGTAAGTAAAAAAGT 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            87 ITTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAAGGAAACAAAACAAA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27 ATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATA 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 TGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATA
                                                                                                                                                                                                                                            4, 540, 547, 549,
629, 630, 631,
671, 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                            728,
800,
843,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 15.9%; Score 35.8; DB 9; Length 885; Best Local Similarity 53.8%; Pred. No. 5.3; Matches 70; Conservative 0; Mismatches 60; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                         726, 727, 798, 799, 836, 842, 8
                                                                                                                                                                                                                                                                                                       624,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15.6%; Score 35.2; DB 10;
58.7%; Pred. No. 4.4;
tive 0; Mismatches 43;
                                                                                                                                                                                                                                                                              516, 518, 9
615, 623, 6
663, 664, 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTHER INFORMATION: Clone ID: 05-LIB34-080-Q1-E1-B9 US-09-983-965-4454
                                                                                                                                                                                                                   NAME/KEY: misc_feature
LOCATION: 74, 149, 159, 221, 254, 286, 352,
LOCATION: 64, 479, 159, 221, 254, 286, 352,
LOCATION: 554, 557, 571, 576, 589, 612, 611,
LOCATION: 635, 650, 653, 657, 661, 662, 66;
OTHER INFORMATION: n = A,T,C or G
FEATURE:
NAME/KEY: misc_feature
LOCATION: 676, 677, 689, 691, 692, 702, 706,
LOCATION: 876, 777, 789, 750, 758, 756,
LOCATION: 856, 857, 860, 865, 868, 869, 876,
LOCATION: 856, 857, 860, 865, 868, 869, 876,
PRIOR FILING DATE: 2001-07-18
NUMBER OF SEQ ID NOS: 14084
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 4260
LENGTH: 885
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOTHER INFORMATION: n = A,T,C or G US-10-198-846-4260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 58.7%
Matches 61; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  147 AAAACAACCT 156
```

9.

ò 셤

```
1330 Acticiforcicaegoriogagicaeacticiforaticaagaaaaaaaaaaaaaaaagaagaa 1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1390 rakararararakekekekerererrerrerrerrerrerrerrarakarekakeketen 1331
                                                                                                           61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                            30 TGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTT
                     1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Xu, Yongyao
APPLICANT: Wang, Youzhen
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
TITLE OF INVENTION: POR IDENTIFICATION, ASSESSMENT, PREVENTION, AND TITLE OF INVENTION: THERAPY OF BREAST CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1747;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wang, Youzhen
APPLICANT: Steinmann, Kathleen
ITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AN
ITLE OF INVENTION: POR IDENTIFICATION, ASSESSMENT, PR
ITLE OF INVENTION: THERAPY OF BREAST CANCER
ITLE REPERENCE: MRI-049
CURRENT APPLICATION NUMBER: US/10/198,846
CURRENT APPLICATION NUMBER: 60/306,220
PRIOR APPLICATION NUMBER: 60/306,220
PRIOR PILING DATE: 2001-07-18
NUMBER OF SEQ ID NOS: 14084
SOFTWARE: FREESEQ for Windows Version 4.0
SEQ ID NO 10020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 9;
                                                                                                                                                                                                    121 TCCCCCAAAAACGAAACAAAAAAAAAAAAAAA 153
                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 34.6;
Pred. No. 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 12188, Application US/10198846
Publication No. US20030099974A1
GENERAL INFORMATION:
APPLICANT: Lillie, James
                                                                                                                                                                                                                                                                                                                                                           Sequence 10020, Application US/10198846
Publication No. US20030099974A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
LOCATION: 1, 1747
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 55.4 Matches 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lillie, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xu, Yongyao
                                                                                                                                                                                                                                                                                                                                                                                   Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-198-846-12188/c
                                                                                                                                                                                                                                                                                                                                         US-10-198-846-10020/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1270 Å 1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  150 A 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-198-846-10020
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                            g
                                                                                                           ò
                                                                                                                                                     g
                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                             Sequence 104, Application US/09917265
Patent No. US20020052030A1
BERNEAL INFORMATION:
APPLICANT: Wonderling, Ramani S.
APPLICANT: Boroughs, Karen L.
TITLE OF INVERTION: CANINE AND FELINE PROTEINS, NUCLEIC ACID MOLECULES AND USES THERE FILE REFRENCE: IM-5
CURRENT APPLICATION NUMBER: US/09/917,265
CURRENT FILING DATE: 2001-07-27
RROR FILING DATE: 2000-08-04
NUMBER OF SEQ ID NOS: 109
SOFTWARE PATENTH VERSION 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Boroughs, Karen L.
TITLE OF INVENTION: CANINE AND FELINE PROTEINS, NUCLEIC ACID MOLECULES AND USES THERE FILE REFERENCE: IM-5
CURRENT APPLICATION NUMBER: US/09/917,265
CURRENT FILING DATE: 2001-07-27
PRIOR APPLICATION NUMBER: 64/223,016
PRIOR FILING DATE: 2000-08-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
159 TGATAGCTTTAGAGAGATATAAGGTATGAAAAAAAAAATTTCTGATACATGATATATAAAA 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1455;
                                              64 TIGGITITACCITCAGAAGAATATITAGITICACICAGGITITI 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74; Indels
                                                                                        99 ATGTTATTACATGTGGAAGAATAGTACCCCTCACACAGAGTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1418 TGAGTAGAAAAAAAAAAAAAAAAAAAAAAA 1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 34.6; DE
Pred. No. 13; Os; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 34.6; D
Pred. No. 13;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 106, Application US/09917265
Patent No. US20020052030A1
GENERAL INFORMATION:
APPLICANT: Wonderling, Ramani S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 109
SOFTWARE: PatentIn version 3.1
SEQ ID NO 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 51.6%;
Matches 79; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Canis familiaris
US-09-917-265-106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79: Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (232)..(897)
CTHER INFORMATION:
US-09-917-265-104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 79; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-09-917-265-106/c
                                                                                                                                                          RESULT 8
US-09-917-265-104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH: 1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
```

g ઠે 유 149

89

```
1129 TCGA 1132
                               150 ACAA 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-925-301-577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-813-153-29
                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1009 TGGAAGAATTTTGTATTATACAAGAAGACCCAGATGAATTATTGTTTAAGTAGAGCATTT 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87 TTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAAAGGAAACAAAA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90 AGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAAAAA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                 27 ATTIGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATA 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30 TGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 9; Length 1132;
                                                                                                                                                                                                                                                                                                                                                          Query Match
15.3%; Score 34.4; DB 9; Length 379;
Best Local Similarity 54.8%; Pred. No. 8.7;
Matches 68; Conservative 0; Mismatches 56; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATI: Rosen et al.
ITILE OF INVENTION: 143 Human Secreted Proteins
FILE REFERENCE: PSSO0P1
CURRENT APPLICATION NUMBER: US/09/986,480
CURRENT FILING DATE: 2001-11-08
PRIOR APPLICATION NUMBER: PCT/US00/12788
PRIOR APPLICATION NUMBER: US 60/134,068
PRIOR PILING DATE: 1999-05-11
NUMBER OF SEC ID NOS: 456
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15.3%; Score 34.4; DE
54.8%; Pred. No. 14;
tive 0; Mismatches
CURRENT APPLICATION NUMBER: US/10/198,846
CURRENT FILING DATE: 2002-07-18
PRIOR PILING DATE: 2002-07-18
PRIOR FILING DATE: 2001-07-18
NUMBER OF SEQ ID NOS: 14084
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 12188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION: n equals a,t,g, or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: n equals a,t,g, or NAME/KEY: SITE LOCATION: (260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 98, Application US/09986480 Publication No. US20030027999A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                          | NAME/KEY: misc_feature
| LOCATION: 378, 379
| CTHER INFORMATION: n = A,T,C or G
US-10-198-846-12188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 54.8
Matches 68; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147 AAAA 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: (153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-986-480-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EO ID NO 98
                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

ઠ 임 ઠે

```
2578 igarargratitingngakonnihitonakakakaritannacakionikingkan 2637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2638 GATTTTTTAAATGCTGTGAATCTATATTTGTTGTTTTRTATTAAAATTCATTTGCCA 2697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64 TTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTTCAAAGCTACGCTGTCC 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 TGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAAATTATGAGGCTCCATGATATGCTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 15.3%; Score 34.4; DB 9; Length 2749; Best Local Similarity 51.3%; Pred. No. 20; Matches 77; Conservative 1; Mismatches 72; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 577, Application US/09925301
Patent No. US20020052308A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PA106
                                                                                                 TTILE OF INVENTION: 67 Human secreted proteins TTILE OF INVENTION: 67 Human secreted proteins CURRENT Rosen et al.

TTILE OF INVENTION: 67 Human secreted proteins FILE REFERENCE: P2023
CURRENT APPLICATION NUMBER: US/09/813,153
CURRENT FILING DATE: 1999-07-29
PRIOR APPLICATION NUMBER: 60/073,160
PRIOR FILING DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR PRIOR APPLICATION NUMBER: 60/073,165
PRIOR PRIOR DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR APPLICATION NUMBER: 60/073,167
PRIOR APPLICATION NUMBER: 60/073,167
PRIOR APPLICATION NUMBER: 60/073,167
PRIOR PRIOR DATE: 1998-01-30
PRIOR FILING DATE: 1998-01-30
PRIOR PRIOR FILING DATE: 1998-01-30
PRIOR PRIOR PLING DATE: 1998-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2698 AAAAAAAAAAAAAAAAAAAAAAAAAAA 2727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124 CCCAAAAAACGAAACAAAAAAAAAAAA 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/925,301
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05882
PRIOR FILING DATE: 2000-03-08
PRIOR PLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
Sequence 29, Application US/09813153
Publication No. US20030045459A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 29
LENGTH: 2749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Homo sapiens
```

```
200343 AATTAATAGAAAAAATCACTATATATTAAAAGCAGCTCATCCTTCTCCCATTATATCAGCATA 200402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200403 CCGAGGTTTTTTGGGTGTAAACATTTTTCTTTAACTAATAAAATATTACTCAAAACAAA 200462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3050 GATTÍTÍTTAAAÍGCTGTGÁAÍCTATÁTÍTTTGTTTTTTTTTATTAÁAATTCATTÍGCCA 3109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  147 AAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGAATCAA 206
                                                                                                                                                                                                                                                                                                                                                                                                                             64 TIGGITITACCTICAGAAGAATATITAGITICACTCAGGITITICAAAGCTACGCTGTCC 123
                                                                                                                                                                                                                                                                                                                     4 TGGTAAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27 ATTIGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATA
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09790989

Sequence 1. Application US/09790989

Patent No. US20020127687A1

GENERAL INFORMATION:
APPLICANT: SHIGENOBU, SHIUJI
APPLICANT: HATTORI, MASAHIRA
APPLICANT: AATANABE, HIDEMI
APPLICANT: AATONI, MASAHIRA
APPLICANT: BAKAKI, YOSHIVUKI
TITLE OF INVENTION: GENOME DNA OF BACTERIAL SYMBIONT OF APPLICA
FILE REFERENCE: 081356/0159
CURRENT APPLICATION NUMBER: US/09/790,988

CURRENT PPLICATION NUMBER: US/09/790,988

CURRENT PPLICATION NUMBER: J001-02-23

PRIOR FILING DATE: 2000-04-07

NUMBER OF SEQ ID NOS: 7

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 1

LENGTH: 640681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lery Match 15.3%; Score 34.4; DB 10; Length 640681; Rest Local Similarity 48.5%; Pred. No. 1.8e+02; Matches 95; Conservative 0; Mismatches 101; Indels 0;
                                                                                                                                                                                                       Score 34.4; DB 10; Length 3161; Pred. No. 21;
                                                                                                                                                                                                                                                                 72; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3110 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 3139
                                                                                                                                                                                                                                                                 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124 CCCAAAAACGAAACAAAAAAAAAAAAA 153
                                                                                                                                                                                                          15.3%;
                        SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 577
                                                                                                                                                                                                          Query Match
Best Local Similarity 51.35
Matches 77; Conservative
NUMBER OF SEQ ID NOS: 1694
                                                                                                     TYPE: DNA
CORGANISM: Homo sapiens
US-09-925-301-577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Buchnera sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
US-09-790-988-1
                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

200463 AAAAAAACCAATTAATTGGTTTTTGATTTAAAAATAGAAAAATTTTTCTATTTTTAAAT 200522

Search completed: June 9, 2003, 08:47:21 Job time : 611 secs

200523 Grganantritrir 200538

207 TTAGGAATTTTTTT 222

Title: Perfect score:

Sequence:

,

OM nucleic

Run on:

Scoring table:

Searched:

Minimum DB Maximum DB

Database

```
ALO60402 Drosophil

BAC021663 Home sapi

AZ523166 216PbB05

AL05985 Drosophil

AW381028 CM-+HT028

BE325739 NF055G028

AU071524 AU071524

BB3740 CpG0090B Cp

BB3740 CpG0090B Cp

AL750985 AL750985 Cp

BAC15194 RPESTGAB0

AZ055107 RPESTGAB0

BH133309 ENTOOLOTF

BH133309 ENTOOLOTF

BH133309 ENTOOLOTF

BH156645 ENTSS5TR

AU088212 AU088212

AL02394 Drosophil

BF014378 ro21e03.Y

BF014378 ro22e03.Y

BF014379 Terraodon

AL03321 Drosophil

AL294778 RPCI-23-1

AZ1329 RPCI-23-1

AZ1329 RPCI-23-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissaue Procuremen: L. Jeffrey Medeiros, M.D., Michael R.

Tissaue Procuremen: L. Jeffrey Medeiros, M.D., Michael R.

Emmert-Buck, M.D., Ph.D.

CDNA Library Preparation: David B. Krizman, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 1183 Std Error: 0.00
Seg primer: -40ml3 fwd. ET from Amersham
                                                                                                                                                                                                                                                                                                                                                                                                                     AA134993 2026g01.8
AZ111894 RPCI-23-4
AQ422165 RPCI-11-2
AL107122 Drosophil
BM882716 rb28h04.y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      341 bp mRNA linear , EST 19-AUG-1997 NCI_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:939394, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases to 341)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Thunor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALIGNMENTS
                                                                                                                                                                                                                                                                                                          B1294873
CNS02WQ2
CNS0039G
CNS0039W
AZ294776
AZ294781
AZ213230
CNS00KNG
                                    AZ523166
CNS015W7
AW381028
BE325739
AU071524
                                                                                                                         BQ451684
AZ055107
BH133309
                                                                                                                                                                                                                                               BF014395
BF014378
BF014182
BE161482
BM160134
                                                                                                                                                                                                                                                                                                                                                                                                                      AA134993
AZ111894
AQ422165
CNS016RS
BM882716
                                                                                                                                                                                                                                     CNS01310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAŠ02552
AAS02552.1 GI:2237519
  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ng62e06.81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ведиенсе.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human.
                                    40.6
40.6
40.4
                                                                           RESULT 1
AA502552
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                          AAS02552 ng62e06.8
AI847782 qh61a07.x
AA682512 zi19a01.8
AL071865 Drosophil
AQY81761 HS 3122.A
AL326107 TeTraodon
                                                                                 9, 2003, 08:36:50 ; Search time 1054 Seconds (without alignments) 3457.291 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                US-09-765-231A-58
225
1 tgatggtaagttgtttcagg.....attaggaattttttttt 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                               32308132
            GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                       16154066 segs, 8097743376 residues
                                                                                                                                                                                                                                           11 number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                             nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAS02552
AI247782
AA682512
CNS00DKY
AQ781761
CNS058MA
                                                                                                                                                                                  IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     em_gss_other:
em_gss_pro:*
em_gss_rod:*
                                                                                                                                                                                                                                                                      seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_estom:*
gb_gss:*
em_gss_hum:
em_gss_inv:
                                                                                                                                                                                                                                                                                                                                                                                 em_esthum:
em_estin:
em_estin:
em_estov:
em_estpl::
em_estpl::
em_htc::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mam:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 estfun:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gb_est4:*
gb_est5:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gb_est2:*
gb_htc:*
                                                                                                                                                                                                                                                                                                                                                                       em_estba:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          _est3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_gss_v
em_gss_f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   341
324
362
928
773
                                                                                                                                                                                                                                                                                                                                                          EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52.0
52.0
21.7
19.1
18.6
                                                                                    June
```

117 117 48.8 43

υ

```
1. .362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                 BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
AA682512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gh61a07.x1 Soares fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1849140 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /dev_stage="20 week-post conception fetus"
| Jab_host="DH10B (ampicillin resistant)"
| Japce="Organ: Liver and Spleen; Vector: pT773D (Pharmacia)
| with a modified polylinker; Site_1: Pac I; Site_2: Eco RI;
                                                                                                                                                                             /note="vector: pawpl0; mRNA made from liposarcoma, cDNA made by oligo-dT priming Non-directionally cloned.
Size-selected on agarose gel, average insert size 600 bp. Reference: Krizman et al. (1996) Cancer Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79 GAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAAC 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAC-AAAAAAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTG 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAAC 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 334)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index

Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: cgapbs-rômail.nih.gov
This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 821 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 GCCATAAATTTGAAATTAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                             19 GGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTTACCTTCA
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="Soares_fetal_liver_spleen_INFLS_S1"
                                                                                                                                                                                                                                                                                                                                                Length 341;
                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                Score 196; DB 9;
Pred. No. 9.6e-30;
                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:939394"
/clone_lib="NCI_CGAP_Lip2"
/tissue_type="liposarcoma"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                     111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGAATCAATTAGGAATTTTTTTTTT 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGAATCAATTAGGAATTTTTTTTTT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:1849140"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
stop: 310.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Insert Length: 821 Std Error:
Seq primer: -40UP from Gibco
High quality sequence stop: 317.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                    Location/Qualifiers
                                                                                                                                                                                                                                                                                     מ
                                                                                                                                                                                                                                                                 56:5380-5383."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AI247782.1 GI:3843179
                                                                                                                                                                                                                                                                                                                                                87.1%;
                                                                                                                                                                                                                                                                                                                                                                                        Matches 207; Conservative
    High quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                     112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                 BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 2
AI247782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
```

LOCUS

셤

ò g

셤 ઠે

ઠે

셤

```
2i19a01.sl Soares fetal liver spleen INFLS_S1 Homo sapiens cDNA clone IMAGE:431208 3', mRNA sequence.
                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 362)

1 Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J., Moore,B., Schellenberg,K., Sreptoe,M., Tan,F., Theising,B., WashU-NCI human EST Project
Unpublished (1997)
                                                                                                                                                                                                                                                                                                This is a subtracted version of the original Soares fetal
                 strand cDNA was primed
               This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Seq primer: -don13 fwd. ET from Amersham High quality sequence stop: 308.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="Soares_fetal_liver_spleen_INFLS_S1"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contract: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
                                                                                                                                                                                                                       Length 324;
                                                                                                                                                                                                                     Query Match 52.0%; Score 117; DB 9; Length 32 Best Local Similarity 100.0%; Pred. No. 5.7e-14; Matches 117; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:431208"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA682512.1 GI:2669793
```

유

8 ઠે

```
AQ781761.1 GI:5684721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seq primer: T7
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          308 TAT 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    223 TTT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         248
                                                                                                                                                                                                                                                                                                                                                         numan.
                                                                                                                                                                                              RESULT 5
AQ781761
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
MEDLINE
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                        g
                                                                                                                                  임
                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lusticed (02-JUM-1999) Genoscope - Centre National de Sequencage : Submitted (02-JUM-1999) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr)
Determination of this BAC-end sequence was carried out as part of a collaboration with the Berkeley Drosophila Genome Project (BDGP). The BDGP is constructing a physical map of the Drosophila melanogaster genome using these BACs. For further information please see http://www.fruitfly.org The BDGP Drosophila melanogaster BAC library was prepared by Kazutoyo Osogawa and Aaron Mammoser in Pieter de Jong's laboratory in the Department of Cancer Genetic at the Roswell Park Cancer Institute in Buffalo, NY. The library is named RPCI-98 and was constructed by partial EcoRI digestion of Drosophila DNA provided by the BDGP from the isogenic strain y2, cn bw sp., the same strain used for the BDGP's and how to order individual BAC clones, the entire library, or filters for hybridization from the BACPAC Resource Center can be found at http://bacpac.med.buffalo.edu/drosophila_bac.htm.
                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                         GSS 04-JUN-1999
                                                                                                                                                        82 GAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCCAAAAAAACGAAACAAA 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              738 ТАТИЧИЧИМАТИТИDGKNИNNAЧИЧИЧИЧИЧИМИНАМИНАААНИЧИЧИЧИЧИМИВАААААА 797
                                                                                                                                                                            Drosophila melanogaster genome survey sequence T7 end of BAC # AECR27A24 of RPCI-98 library from Drosophila melanogaster (fruit ALO)1865
                                                                                                                                                                                                                                   22 ATAAAATTTGAAATAAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAA
                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
    Bento Soares and M.Fatima Bonaldo."
37 g 110 t
                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 928;
                                                                              Length 362;
                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           191 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Drosophila melanogaster'
|db_xref="taxon:7227"
                                                                                              Best Local Similarity 100.0%; Pred. No. 5.4e-14; Matches 117; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21.7%; Score 48.8; DE
31.4%; Pred. No. 1.4;
:ive 59; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="RPCI-98"
/note="end : T7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84 9
constructed by Bent
71 c 67 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila melanogaster.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AL071865.1 GI:4948170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (равев 1 то 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           70
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 64; Conserv
                      114 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           262
                                                                                                                                                                                                                                                                       61
                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                       NITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                               RESULT 4
CNS00DKY
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
```

g

ò

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 773) Mahlairas, G.G., Wallace, J.C., Smith, K., Swartzell, S., Holzman, T., Keller, A., Shaker, R., Furlong, J., Young, J., Zhao, S., Adams, M.D. and
                                                                                                                                                                                                                                                   AQ781761 T73 bp DNA linear GSS 02-AUG-1999 HS_3122_A2_D08_T7C CIT Approved Human Genomic Sperm Library D Homo Agpiens genomic clone Plate=3122 Col=16 Row=G, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                         162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               307
  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               High Throughput Sequencing Center University of Washington University of Washington 401 Queen Anne Avenue North, Seattle, WA 98109, USA Tel: (206) 616-3618 Bmail: jwallace@u washington.edu Clones any be purchased from Research Genetics (info@resgen.com). BAC end Wab Server: http://www.htsc.washington.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:9606"
/clone="Plate=3122 Col=16 Row=G"
clone_lib="CIT Approved Human Genomic Sperm Library D"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Organ: sperm; Vector: pBeloBAC11; BAC Clones in E-Coli DH108"
ACAAAAAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence-tagged connectors: A sequence approach to mapping and scanning the human genome
Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 22;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Mahairas GG, Wallace JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
19.1%; Score 43;
Best Local Similarity 59.3%; Pred. No.
Matches 73; Conservative 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               High quality sequence stop: 773.
Location/Qualifiers
                                                                                                                                           858 RWWTTTTTTTTTTTTTTT 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84 9
                                                                                             202 ATCAATTAGGAATTTTTTTTTT
```

CNS058MA/c

SOURCE ORGANISM

REFERENCE AUTHORS ERENCE AUTHORS

DURNAL

TITLE

ACCESSION VERSION KEYWORDS

```
- Web: www.genoscope.cns.fr.

- Web: www.genoscope.cns.fr.

- Determination of this BAC-end sequence was carried out as part of collaboration with the Berkeley Drosophila Genome Project (BDGP).

The BDGP is constructing a physical map of the Drosophila melanogaster genome using these BACs. For further information please see http://www.fruitfly.org The BDGP Drosophila melanogaster BAC library was prepared by Kazutoyo Gsoegawa and Aaron Mammoser in Pieter de Jong's laboratory in the Department of Cancer Genetics at the Roswell Park Cancer Institute in Buffalo, NY. The library is named RPCI-98 and was constructed by partial BCoRI digestion of Drosophila DNA provided by the BDGP from the isogenic strain y2; on bw sp, the same strain used for the BDGP's pl and EST library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AW504318
UI-HF-BNO-alg-e-05-0-UI.rl NIH_MGC_50 Homo sapiens cDNA clone
IMAGE:3079401 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 78 AGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAAGGAAA 137
                                                                                                                                                                                    Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - FRANCE (E-mail : segref@genoscope.cns.fr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. I (bases 1 to 290)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 AGGCATAAAATTTGAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTC 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and how to order individual BAC clones, the entire library, or filters for hybridization from the BACPAC Resource Center can be found at http://bacpac.med.buffalo.edu/drosophila_bac.htm. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1015 AAAAAAMAMATTTCTTWAMTTWWYYTCYCWMACAMCTCCCTTYMCCACMAWWMCCCMW
                   Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
Neoptera, Endopterygota, Diptera, Brachycera, Muscomorpha,
Ephydroidea, Drosophilidae, Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18.3%; Score 41.2; DB 17; Length 1101; 34.5%; Pred. No. 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   138 CAAAACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGAT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D.
Email: cgapbs.r@mail.nih.gov
Eco RI site shown at the beginning of the sequence.
Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
CDNA Library Preparation: M.B. Soares Lab
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         melanogaster"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Drosophila
db_xref="taxon:7227"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="RPCI-98"
/note="end : TET3"
163 c 143 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            clone="BACR27P19"
Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AW504318.1 GI:7141985
                                                                                                        (bases 1 to 1101)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 34.5<sup>a</sup>
Matches 58; Conservative
                                                                                                                                    Genoscope.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AW504318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
AW504318
                                                                                                        REFERENCE
                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila melanogaster genome survey sequence TET3 end of BAC #BACR27P19 of RPCI-98 library from Drosophila melanogaster (fruit AL060402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (12-APR-2000)
This sequence is a single read and was generated as part of a large scale clone-end sequencing project of the Terraodon nigroviridis genome. For more information, please take a look at http://www.genoscope.cns.fr/Tetraodon.
Location/Qualifiers
                         CNSO58MA 1inear GSS 26-MAY-2000
Tetraodon nigroviridis genome survey sequence T3 end of clone
002B22 of library A from Tetraodon nigroviridis, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTGATTTNCCGGTTGTGACCATTTTTAGCCGTACAATTATGGGGATTTTCTATGTTAAA 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64 TTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCC 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     761 NATTTTCTACATTAAACATTATGTTTAATGTCATGAATGATTGTCNAAAATTAGTTGTAT 702
                                                                                                                                                                                       GSS; genome survey sequence.

Tetraodon nigroviridis.

Tetraodon nigroviridis.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Eukaryota; Meopterygii; Teleostel; Euteleostel; Neoteleostel;

Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;

Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 964)
Roest-Crollius, Jaillon, O., Dasilva, C., Bouneau, L., Fisher, C.,
Bernot, A., Fizames, C., Wincker, P., Brottier, P., Quetier, F.,
Saurin, W. and Weissenbach, J.
Human gene number estimate provided by genome wide analysis using
Tetraodon nigroviridis DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 (bases 1 to 964)
Roest-Crollius, H., Jaillon, O., Dasilva, C., Fizames, C., Fisher, C.,
Bouneau, L., Billault, A., Quetier, F., Saurin, W., Bernot, A. and
Weissenbach, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Charaterization and repeat analysis of the compact genome of the freshwater pufferfish Tetraodon nigroviridis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Tetraodon nigroviridis"
/db_xref="taxon:99883"
/clone="002822"
/clone_lib="A"
/note="Genoscope sequence ID : COAA002DA11A1-end : T3"
/note="Genoscope sequence ID : COAA002DA11A1-end : T3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTAAGTTGTTTCAGGCATAAAATTTGAAATTAATGAGGCTCCATGATATGCTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 964;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           124 CCCAAAAAACGAAACAAAACAAAAAAAACAACCTTTTTAAGAGTTGATG 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAAAAAAAAAAAAAAATCAAGACAAGTTCTTTTCAGATTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 41.8; DB 17;
Pred. No. 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila melanogaster
                                                                                                                                                                GI:8219696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:4947764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18.6%;
52.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 964)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Test Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL060402.1
GSS.
                                                                                                                                                             AL326107.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Senoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
CNS00D90/c
                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE COUNT
ORIGIN
```

REFERENCE AUTHORS TITLE JOURNAL COMMENT

FEATURES

g

셤

8

a

8

JOURNAL

TITLE

ACCESSION VERSION KEYWORDS SOURCE

Gaps

Indels

```
AZ523166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AZ523166/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:9906"
/clone="IMAGE:3079401"
/clone="IMAGE:3079401"
/clone="IMAGE:3079401"
/clone="IMAGE:3079401"
/cell type="germinal center B cells"
/cell type="germinal center B cells"
/cell type="germinal center B cells"
/cell Time="MAGC85"
/lab_Rost="WHGC85"
/lab_Rost="Wector: pT773-Pac; Site_1: Not1; Site_2: Eco RI;
/note="Vector: pT773-Pac; Site_1: Not1; Site_2: Eco RI;
/note: pT773-Pac; Site_1: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HTC 07-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             111 GAAAAAGTATTTGGGCCCCAAAAATGGCATAACGGTTTTATCCACAACCTAAGAAGAA 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAAAAAA 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTA 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 1562)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (04-FEB-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anuradha
cDNA Library Arrayed by: M.B. Soares Lab
DNA Sequencing by: M.B. Soares Lab
Clone distribution: MGC clone distribution information can be
found through the I'm A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
The following repetitive elements were found in this cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadanagystemshology.org
Anup Madan, Jessica Pahey, Erin Helton, Mark Ketteman, Anurac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 18.2%; Score 41; DB 10; Best Local Similarity 57.4%; Pred. No. 89; Matches 74; Conservative 0; Mismatches 55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1562 bp mRNA
Homo sapiens, clone IMAGE:4077047, mRNA.
BC022863
                                                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                         sequence:
8-63, >POLY A#Simple repeat
Seq primer: M13 Forward.
                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BC022863.1 GI:22135650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   231 CAAAATTTT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151 CAACCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ESSION
SION
WORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loc?
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BC022863
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
```

셤

g ઠે g

ò

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1407 TGATAATATTGAAAATGGTGACCAAAACTCCTATGTAACTTGTAGCAAATTTTTCATCT 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1467 TIGIGICITITGGAATITAGAAAATATITAATITICICITAAGICITATAAAGITITACTCA 1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GSS 07-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /strain="ANKA clone 15cyl (clone of the ANKA 8417 clone)"
/db xref="taxon:5821"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="Vector: pBluescript SK(+) vector DNA, phagemid excised from lambda ZAP; Site_1: EcoRV; Site_2: EcoRV; Genomic DNA was prepared from asynchronous blood stage forms of the cloned ANKA isolate of P. berghei grown in laboratory Swiss white mice. The DNA was purified from
Clone distribution: MGC clone distribution information can be fou through the I.M.A.G.E. Consortium/LiNL at: http://image.llnl.gov Series: IRAL Plate: 32 Row: 1 Column: 8
This clone was selected for full length sequencing because it passed the following selection criteria: Similarity but not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AZ523166 595 bp DNA linear GSS 07-MAY-2216PbB05 Pb MBN #21 Plasmodium berghei genomic 3', DNA sequence.
                                                                                                                                                                                                                                                                                                    /db_xref="taxon:9606"
/clone="MAGE:4077047"
/tissue_type="Bone marrow, acute myelogenous leukemia"
/clone_lib="NIH_MGC_55"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.

1 (bases 1 to 595)

Carlton,J.M.-R. and Dame,J.B.

The Plasmodium vivax and P. berghei gene sequence tag projects Parasitol. Today (Regul. Ed.) 16 (10), 409 (2000)

Contact: Dame JB

Dept. of Pathobiology, College of Veterinary Medicine University of Florida
2015 8N 23rd Avenue, Bldg 1017, Gainesville, FL 32611, USA

Fax: 352 392 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGTG
                                                                                                                                                   identity to protein This clone has the following problem: incomplete processing. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11; Length 1562;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone lib="Pb MBN #21"
/dev_stage="asexual blood forms"
/lab_host="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1527 AATCCAAAAAAAAAAAAAAAAAAAAAAAAAA 1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 TCCCCCAAAAACGAAACAAAAAAAAAAAAA 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Plasmodium berghei"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 41; DB 1
Pred. No. 38;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              464
                                                                                                                                                                                                                                           1. .1562
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PDNR-LIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: damej@mail.vetmed.ufl.edu
Seg primer: M13(-20) forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       331 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AZ523166.1 GI:13961890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18.2%;
54.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Plasmodium berghei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 54.2
les 83; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Plasmodium berghei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . .595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Class: shotgun.
```

```
Query Match
Best Local Similarity 40.1
Matches 73; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AW381028
                                                                                                                                                                                                                                                                                                                                                                                            TG 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brazil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST
                                                                                                                                                                                                                                                                                                                                                                                               187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
AW381028/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                 g
                                                                                                                                                      g
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                            ò
           ultracentrification and precipitated. Purified DNA was digested with mung bean nuclease in the presence of 36-18% formanide at 50 C, as described (Vernick, K.D., Imberski, R.B., and McUtchan, T.F. 1988. Nucleic Acids Research 16:6883-6896). The ends of the digestion fragments were polished using T4 DNA polymerase, and the fragments size selected in the range 500-2000 bp. These were ligated into the EcoRV-cleaved and dephosphorylated pBluescript SK(+) vector. Recombinant plasmids were used to transform E. 78 C 57 g 224 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CNS015W7

Drosophila melanogaster genome survey sequence SP6 end of BAC BACN15B11 of DrosBAC library from Drosophila melanogaster (fruit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (23-JUL-1999) Genoscope - Centre National de Sequencage : BP 1919 19106 EVRY cedex - PRANCE (B-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr Determination of this BAC-end sequence was carried out as part of a collaboration with the Buropean Drosophila Genome Project (BDGP) - http://www.edgp.ebi.ac.uk - This Drosophila melanogaster BAC library (Bros BAC) was made by Alain Billaud at CEPH (Centre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d'Etude du Polymorphisme Humain) with funding provided by a MRC project grant. The DNA was prepared from embryos by Alain Bucheton and Genevieve Payan. It has been constructed in the vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                               510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71 TACCTICAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAA 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     131 AACGAAACAAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCC 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Trititgaaaaaatrititritititgggrititaaagaaaaaaaatritcccriaaaa 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   449 GGGGATCAAAAAAAAAAAATTTTTTTAAAAATTAAAGGGGGAATTCCAAGAGGGGGGC 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                             569 TITITICCCCCAAAAATITAAAATTTTTAAAAATTATAAAATTCCCAATATGGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                  11 TIGITICAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster.
Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterrygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
contaminating host DNA by Hoechst Dye 33258-CsCl
                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                       Score 40.6; DB 17; Length 595;
Pred. No. 74;
0; Mismatches 109; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Drosophila melanogaster"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191 TCCTCTGCTGAATCAATTAGGAATTTTTTTTTT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           389 ATATTTTTTTTGAATTCCATATTGATATTATTT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fly), genomic survey sequence. AL105985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     xref="taxon:7227"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone lib="DrosBAC"
/plasmId="pBeloBAC11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="BACN15B11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AL105985.1 GI:5619413
                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 49.3%;
Matches 106; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'note="end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 957)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pBeloBAC11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genoscope
                                                                                                                                                                                                                                                      236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PASE COUNT
ORIGIN
                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CNS015W7/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
```

유

ઠ

8 8

ઠે

요

```
/note="Organ: head neck; Vector: puc18; Site 1: Smal; Site 2: Smal; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under 1 % 7 c 97 g 170 t.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AW381028 525 bp mRNA linear EST 04-FEB-2000
CM1-HT0285-101199-036-h05 HT0285 Homo sapiens cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fax: +55-11-2707001

Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=CM1&t2=CM1-HT0285-101199-036-h05&t3=1999-11-10&t4=1)
                                                                                                                                                                  805 TWATTTTTTTAAAAAAAAAAATAWWWAAATTAAYTTTAGTTCCWWAAAAATGAGATTA 746
                                                                                                                                                                                                                            67 GTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCC 126
                                                                                                                                                                                                                                                                             127 AAAAAACGAAACAAAACAAAAAAAAAACTAACCTTTTTAAGAGTTGATGGCTACTCATTTGATC 186
                                                                                                                                                                                                                                                                                                                                                                 45 GGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTT 104
                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chordata, Craniata, Vertebrata, Euteleostomi, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                              7 TAAGTIGITTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTG
                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
'`
                                                       .
0
  957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 525;
Length
                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCGP http://www.ludwig.org.br/ORESTES.
The FAPESP/LICR Human Cancer Genome Project
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 40.4; DB 10;
Pred. No. 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86;
                                                       82;
  DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
  18.0%; Score 40.6; I
40.1%; Pred. No. 58;
                                                       27; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="HT0285"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seg primer: puc 18 forward
High quality sequence start: 36
High quality sequence stop: 112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Simpson A.J.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AW381028.1 GI:6885687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 51.7%;
Matches 92; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
1 (bases 1 to 525)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .525
```

ઠે

ò g

```
17.78;
54.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B83740.1 GI:2896202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 54.4<sup>1</sup>
Matches 80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              108
                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
MEDLINE
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                  RESULT 14
AU071524
                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B83740/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Expressed Sequence Tags from the Samuel Roberts Noble Foundation Medicago truncatula stem library
L Unpublished (2000)
On Jul 14, 2000 this sequence version replaced gi:9199516.
Contact: Dixon RA
Plant Biology Division
The Samuel Roberts Noble Foundation
The Samuel Roberts Roberts Noble Foundation
The Samuel Roberts Roberts Roberts Noble Foundation
The Samuel Roberts Robe
                                                                                                                                                                                                                                                                                                                                                                                        475 bp mRNA linear EST 21-DEC-2000
NF055G02ST1F1000 Developing stem Medicago truncatula cDNA clone
NF055G02ST 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Medicago truncatula
Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots,
Rogidae, eurosids I, Fabales, Fabaceae, Papilionoideae, Trifolieae,
71 TACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAA 130
                                                                                       158 TIGITICAGACTTATAATTIGTAGTAATTAAAATGATT--TITTTTTTGCCAGTTIGGTTG 101
                                                                                                                                             338 TTTAGCATAACTGCTGTCCCAGAAAGCAAATTTAAATTATGCAATCAGCAGATTAAGGA 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Medicago.
1 (basea 1 to 475)
1e, X.-Z., Shadle,G., Scott,A.D., Harris,A.R., Gonzales,R.A., Bell,C.J., Flores,H.R., Inman,J.T., Weller,J.W., May,G.D. and Dixon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           278 GACTATAGCTAGAGCTACAACTTCTGATATCTGTGTGAGAAAATCCTATTT 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 TTGTTTCAGGCATAAAATTTGAAATTATGAGGCTCCATGATATGCTATATTGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /dev_stage="Pooled developmental"
/note="Vector: Lambda Zap; Contains a mixture of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 17.8%; Score 40; DB 10; Length 475; Similarity 59.9%; Pred. No. 1.1e+02; 85; Conservative 0; Mismatches 55; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Medicago truncatula"
/db_xref="taxon:3880"
/clone="NF055G02ST"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="Developing stem"
/tissue_type="stem"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   internodal stem segments
67 c 55 g 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            131 AACGAAACAAAAAAAAA 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40 AAAAAAAAAAAAAAAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BE325739.2 GI:11936314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 85; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     barrel medic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182
                                                                                          105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
PRCE
RGANISM
                                                                                                                                                                                                                                                                                                                                                       RESULT 13
BE325739/c
                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

```
B83740 647 bp DNA linear GSS 12-MAY-2000
CpG0090B CpIOWAgDNAl Cryptosporidium parvum genomic, DNA sequence.
B83740
AU071524 AU071524 208 bp mRNA linear EST 23-JUN-1999
AU071524 Dictyostelium discoideum SS (H.Urushihara) Dictyostelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         115 TTTTTAAAATAAAAATTAAAAATTTATAAACCCATAGTTTTTAGATATAATATAGAATAA 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cryptosporidium parvum
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
E (Vaptosporidiidae; Cryptosporidium.
E (Chasea 1 to 647)
S Strong, W.B. and Nelson, R.G.
Preliminary profile of the Cryptosporidium parvum genome: an expressed sequence tag and genome survey sequence analysis
L Mol. Biochem. Parasitol. 107 (1), 1-12 (2000)
E 2018381.
Contact: Nelson, R. G.
Contact: Nelson, R. G.
Depts. of Medicine & Pharmaceutical Chemistry
San Francisco General Hospital-University of California, San
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67 GITITIACCTICAGAAGAATATITAGITITCACTCAGGITITITCAAAGCTACGCIGICCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 TAAGTIGITICAGGCATAAAATTIGAAATAAATTATGAGGCTCCATGATATGCTATATTG
                                                                                                                                                              Dictyostelium discoideum.

SM Dictyostelium discoideum

Bukaryota: Mycetozaa; Dictyosteliida; Dictyostelium.

E I (basea I to 208)

S Urushihara,H.

Developmental cDNA in Dictyostelium discoideum (1999)

L Unpublished (1999)

CONCact: Hideko Urushihara
Institute of Biological Sciences
Unpublished (1993)

Tel: 81-298-53-464

Fax: 81-298-53-464

Fax: 81-298-53-464

Fax: 81-298-53-614

Email: hideko@biol.tsukuba.ac.jp

PROJECT = Dictyostelium discoideum cDNA project in Japan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Dictyostelium discoideum'
                                                      discoideum cDNA clone SSB723, mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 39.8; DB 9;
Pred. No. 1.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127 AAAAACGAACAAAACAAAAAAAA 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                175 ACTTATAGCAAAAAAAAAAAAA 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:44689"
/clone="SSB723"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cryptosporidium parvum.
                                                                                                             AU071524.1 GI:5161713
```

```
us-09-765-231a-58.rst
```

```
/db xref="taxon:807"
/clone_lib="CplOWAgDNA1"
/labhoste:=E. coli XL2 Blue MRF" | site l: EccRV; C.
/note="Vector: palbueScript II (SK-); Site l: EccRV; C.
/note="vector: palbueScript II (SK-); Site l: EccRV; C.
parvum (IOWA isolate) genomic DNA was hydrodynamically
sheared to produce fragmente having a tight size
distribution between 2-4 kb by Dr. Yvonne Thorstenson of
the Stanford DNA Sequencing and Technology Center
(http://sequence-www.stanford.edv/shear.htm
). The randomly sheared gDNA was chromatographed on
Sephacry1 S-400 to remove any small fragments and DNA
eluting in the void volume was subcloned into an EcoR
V-digested, alkaline phosphatase-treated pBlueScript II
(SK-) vector and transformed into E. coli strain XL2 Blue
MRF'. Recombinant clones from the first plating of the
library were selected for sequence analysis using T3 and
T7 primers."
Box 0811, San Francisco, CA 94143-0811, USA
Tel: 415 206 8846
Fax: 415 206 3353
Email: malaria@itea.ucsf.edu
Submitted sequence has been edited to remove vector sequences 5' to the insert, to correct miscalled bases and assign uncalled (N)
bases throughout the sequence, and to terminate when base-calling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism="Cryptosporidium parvum"
                                                                                                                                                                                                                                                                                                                                                                      High quality sequence stop: 647.
Location/Qualifiers
                                                                                                                                                                                                                                                             became ambiguous.
Seq primer: T3
Class: shotgun
                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
```

183 a

0; Gaps 17.7%; Score 39.8; DB 17; Length 647; 64.8%; Pred. No. 1e+02; Live 0; Mismatches 32; Indels 0. Query Match
Best Local Similarity 64.8³
Matches 59; Conservative 81 AGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAA 140

ઠે

141 AACAAAAAAACAACCTTTTTAAGAGTTGATG 171

570 ATGAAACTATAATGAAGATCAGATTGGATG 540

Search completed: June 9, 2003, 10:23:43 Job time : 1060 secs

ч

```
Substantially purified protein, polypeptide or their fragments, used to identify a biologically active compound or composition and treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vasanthakamur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-451914/48.
                     WO200153531-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Phippard D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-JUL-2001
                                                                                                                                                                                           AAH23128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
AAH23128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chemically m
Chemically treated
Human gene regulat
Signal transductio
Buchnera ap. genom
Human immune syste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteoarthritis tis
Methanococcus jann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA transcription
                                                                                                  7, 2003, 14:33:54 ; Search time 154 Seconds (without alignments) 3290.257 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | S1DS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1988.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1988.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA2001.DAT:
| S1DS2/gcgdata/geneseq/geneseqn-embl/NA2001.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                      US-09-765-231A-58
225
1 tgatggtaagttgttcagg.....attaggaatttttttt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N Geneseq 101002:*
1: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1980.
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                 Nl number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                  2185239 seqs, 1125999159 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH23128
AAV21209
ABK28306
ABN80174
ABL70557
AAS61214
                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                              - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABK31314
ABA92787
ABL33263
                                                                                                                                                                                                                                             IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      225
1664976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5518
6809
6809
6809
6809
640681
12393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0
21.5
18.2
17.8
17.8
17.8
17.8
                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
                                                                     OM nucleic
                                                                                                                                                                                                                                                                                                                                                                   88
                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                         nimum
                                                                                                                                                                                                                                                                                                                                                                                       Maximum
                                                                                                        ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                        Run
```

```
Human immune syste
Human breast cance
Chemically treated
Human polynuclecti
Human immune syste
                                                                                                                         Drosophila melanog
Human immune syste
Human chemically m
Human digestive sy
                                                                                                                                                                                                                                 Human prostate exp
cDNA encoding huma
Human stromal cell
Tumour suppressor
                                    Gene #1661 used to
Human chemically p
Human immune syste
                                                                                                                                                                                                                                                                      Signal transductio
Rat differential t
Human polynucleoti
          breast cance
growth arres
                                                                 Drosophila melanog
Human immune syste
                                                                                                      Human metastasis a
Human prostate exp
                                                                                                                                                                                                               Human immune/haema
Human prostate exp
                                                                                                                                                                                                                                                                                                   Human immune syste
Human immune syste
 protein phos
                                                                                              Human immune syste
                                                                                                                                                                                                                                                                                                                     Borrelia burgdorfe
                                                                                                                                                                                                                                                                                                                              Human immune syst
Human metastasis
                                                                                    Human YAP cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Osteoarthritis; infectious disorder; Crohn's disease; sepsis; human; wound healing; osteopathic; anti-arthritic, anti-inflammatory; vulnerary; antibacterial; antiallergic; ds.
                    Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ostecarthritis tissue-derived nucleic acid sequence #58.
                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
                                                                                                     ABL34554
ABC88918
ABC88918
ABC34184
ABC34119
AAK86641
ABL32218
ABL32228
AAK55669
AAK52680
ABV22860
                                                                                                                                                                                                                                                            AAS46359
ABK31268
AAH81841
AAI89390
ABL33350
                  AAV05164
ABQ85902
ABN95163
ABK40070
                                                                                   AAT30347
ABL33208
                                                                                                                                                                                                                                          AAV07076
                                                                                                                                                                                                                                                     AAD38589
                                                                                                                                                                                                                                                                                                            ABL34078
                                                                                                                                                                                                                                                                                                                                                                                                                    ВР
                                                                                                                                                                                                                                                                                                                                                                                                                    AAH23128 standard; DNA; 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-JAN-2001; 2001WO-US00016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-JAN-2000; 2000US-0176523
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                    1479
7924
40388
86788
5153
6725
6725
3002
3002
113515
113515
11049
11049
1132
                                                                                                                                                                                                                                          3541
3541
10609
10609
                                                                                                                                                                                                                                                                                                                     91
```

× ď

Dotson S,

Ö

0000000

```
osteoarthritis tissues. The sequences are useful as probes and for the diagnosis or prognosis of mammalian osteoarthritis. The polynucleotides and polypeptides of the invention are useful for generating diagnostic reagents, as targets for small molecule development, generation of therapeutics, and cloning genes. Specific antibodies are used to generate enzyme linked immunosorbent assays for detection of osteoarthritis. The invented molecules can be used to treat osteoarthritis or to analyse the disease-modifying activity of osteoarthritis drugs. Other disorders treatable using the nucleic acid sequences include atopic, inflammatory and infectious disorders e.g. Crohn's disease and sepsis, and wound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATTGGTTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATTGGTTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTAGGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCCCCAAAAAACGAAACAAAACAAAAAAAAACAACTTTTTAAGAGTTGATGGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                   Sequences AAH23071-23152 represent nucleic acid sequences derived from
                                                                                                                                                                                                                                                                                                                                                                                               TGATGGTAAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Methanococcus jannaschii; methanogenic archaeon; circular chromosome;
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Complete genome sequence of methano-genic archaeon, Methanoccoccus jannaschii - useful in identification of M. jannaschii genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genome; autotrophic; extrachromosomal element; identification; ds
                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                               Length 225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                           100.0%; Score 225; DB 22;
100.0%; Pred. No. 1.2e-45;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                           Sequence 225 BP; 72 A; 38 C; 35 G; 80 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Methanococcus jannaschii circular chromosome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UNII ) UNIV ILLINOIS FOUND.
(UVJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           White OR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV21209 standard; DNA; 1664976 BP
                                 Claim 1; Page 137; 144pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Venter JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97WO-US14900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-0024428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                               est Local Similarity 100.
Matches 225; Conservative
mammalian osteoarthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methanococcus jannaschii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INST GENOMIC RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-169145/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Smith HO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9807830-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bult CJ,
                                                                                                                                                                                                                                                                                                                               nery Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV21209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GENO-)
                                                                                                                                                                                                                                                           healing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV21209
ID AAVZ
XX
XX
AC AAVZ
XX
DT 10-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
The present sequence represents the complete 1.66-megabase pair genome sequence of the Methanococcus jannaschii circular chromosome. The present invention describes M. jannaschii open reading frames from the genome sequence. The invention also describes a computer based system for identifying fragments of the M. jannaschii genome that are homologous to target nucleotide sequences, comprising: (a) data storage means comprising the nucleotide sequence of the 1664976, 58407 or 1650 by sequence at least 99.3% identical to it; (b) search means for comparing a target sequence to the nucleotide sequence of the data storage means to identify a homologous sequence, and (c) retrieval means for comparing the homologous sequence. The method, which is based on whole genome candom sequencing of an autotrophic archaeon M. jannaschii, the genome of which consists of 3 physically distinct elements, a large circular chromosome (the 1664976 by sequence given in AAV21210), and a small circular extra-chromosomal element (the 16850 by sequence given in AAV21211), can be used in the identification of M. jannaschii genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151523 AAAAATCTATAAAAATCAATTATTACTCTTTTTCCAATACTCTTTAATTTGTTTTTTATC 151582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            151403 TAAATCTCTGCAGCCCTTCTATTTCCATCATTATTATAGCTACATGTTTTGGTAAATTG 151462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           151522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     psoriasis; Rieger's syndrome; neurological disorder; erythropolesis; neurodegenerative disorder; Waardenburg syndrome; Niemann-Pick disease; myealodysplastic syndrome; myocardial infarction; hypertension; arthritis; andiogenesis; congenital heart disease; HDR syndrome; gene therapy; polyglutamine disorder; solid tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA transcription associated gene; peptide nucleic acid; PNA-oligomer; PNA; cytosine methylation state; SNP; retroviral infection; gene; ds; single nucleotide polymorphism; adenosine deaminase deficiency, cancer; viral infection; Sezary syndrome; haematological disorder; tuberculosis; immunological disorder; Werner syndrome; developmental disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1664976 BP; 568133 A; 264649 C; 258701 G; 573392 T; 101 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67 GITITIACCITICAGAAGAATATITIAGITITICAGGITITITICAAAGCIACGCTGTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151463 retritaréaanageerericiaaaarerrérégnaaritiraaaacreégagirerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 TAAGTIGITICAGGCATAAAATTIGAAATAAATTATGAGGCTCCATGATATGCTATATIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           127 AAAAAACGAAACAAAACAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 48.4; DB 19; Length 1664976;
Pred. No. 0.029;
0; Mismatches 101; Indels 0; G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA transcription associated complementary genomic DNA #90.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    151583 TTACCCAAAATCCCCACCTATTAGGAATTT 151612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187 IGCCICCICIGCIGAAICAAITAGGAAITI 216
                                             Claim 13; Page 152-585; 614pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK28306/c
ID ABK28306 standard; DNA; 5518 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 51.9%;
Matches 109; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-APR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200192565-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABK28306;
  fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
```

(first entry)

15-JUL-2002

```
ABN80174 standard; DNA; 6809 BP
                             WPI; 2002-090046/12.
                                                                                                                                                              TAACT 3904
                                                                                                                                                         TGCCT 191
          07-APR-2000;
                                                                                                                                                         187
                                                                                                                                                              3908
                                                                                                                                                                               ABN80174;
                                                                                                                                                                       ABN80174/c
ID ABN8C
XX
AC ABN8C
XX
g
                                                                                                                                         유
                                                                                                                                              ઠે
                                                                                                                                                   윱
                                                                                                                                                         ઠે
```

ò ò The invention relates to a nucleic acid, which comprises a segment of the chemically pretreated DNA of genes associated with DNA transcription from one of 346 sequences, and an oligomer in particular an oligonucleotide or peptide nucleic acid (PNA) coligomer that hybridises to or is identical to the chemically pretreated DNA of genes associated with DNA transcription. The set of oligomer probes are useful for detecting the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) in a chemically pretreated genomic DNA. The nucleic acids are useful for diagnosing or treating diseases associated with DNA transcription (particularly with the methylation status) e.g. adenosine deaminase deficiency, viral infection, retroviral infection, Sezary syndrome, tuberculosis, developmental disorders, psoriasis, Rieger's syndrome, tuberculosis, developmental disorders, psoriasis, Rieger's syndrome, tuberculosis, developmental disorders, psoriasis, Rieger's syndrome, tuberculosis, developmental disorders, psoriasis, waardenburg syndrome, hypertension, angiogenesis, erythropoiesis, congenital heart disease, HDR syndrome, arthritis, polyglutamine disorders, solid tumours or cancer. Sequences ABRZ8127-ABRZ8472 represent DNA transcription associated genome DNA molecules of the invention.

Note: The sequence data for this parent did not form part of the printed specification but was obtained in electronic format directly from the 4028 TTACTTAATTAATAATATATAATATATACTTCAAACTCTTAAAAACTAATTACTCCTAA 3969 3968 AATAAAAAATACTTAATATAAAAACTACTATTTTTAAATTAAATTACAACTTAATCTTATT 3909 127 AAAAAACGAAACAAAAAAAAAAAAACTTTTTAAGAGTTGATGGCTACTCATTTGATC 186 67 GITTIACCITCAGAAGAATAITIAGITICACICAGGITITICAAAGCIACGCIGICCCCC 126 TAAGTICITICAGGCATAAAATITIGAAATAAATTATGAGGCTCCATGATATGCTATATTG 0; Gaps New nucleic acids or oligomers, useful for diagnosing or treating diseases associated with DNA transcription, e.g. immunological disorders, Werner syndrome, psoriasis, myocardial infarction, solid tumours or cancer. Ouery Match
18.2%; Score 41; DB 24; Length 5518;
Best Local Similarity 51.4%; Pred. No. 0.87;
ptches 95; Conservative 0; Mismatches 90; Indels (Sequence 5518 BP; 1899 A; 52 C; 1031 G; 2536 T; 0 other; Claim 1; SEQ ID No 180; 32pp; English Berlin K; 2000DE-1019058. 2000DE-1019173. 30-JUN-2000; 2000DE-1032529. 01-SEP-2000; 2000DE-1043826. 06-APR-2001; 2001WO-EP03973 Olek A, Piepenbrock C, European Patent Office. (EPIG-) EPIGENOMICS AG

```
The invention relates to a nucleic acid (I) comprising a sequence at least 18 bases in length of a segment of chemically pretreated DNA (II) of genes associated with development selected from 87 genes listed in the specification such as ACCPN, ADRN, or AFDI and comprising one of 350 sequences (ABN79984-ABN80333) or their complements. The invention is useful for the diagnosis or therapy of diseases associated with comparing genes (HOX), like diabetes, cancer, apoptosis related to homeobox containing sensociated with congenital heart disease, epilepsy, diseases related to histone deacetylation, Currarino syndrome, diseases related to distone deacetylation, Currarino syndrome, diseases related with the development of the brain and limb girdle muscular dystrophy and dwarfism. Oligomers specific to each of the genes are useful for detecting the methylation state of all CpG dinucleotides within the 350 sequences or (II) and their complements sequences, as primer oligonucleotides for the amplification of the 350 sequences, (II) and/or their complements and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1324 ACAAAAACTATTTAAATTAAATCCGTCTATCAATTTTTCGTTTTACTACAATTACTTT 1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77 CAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAAGGAA 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  as oligomer probes for detecting the cytosine methylation state and/or single nucleotide polymorphisms (SNPs).

Note: The sequence data for this parent did not form part of the printed specification but is based on sequence information supplied to Derwent by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel nucleic acid useful for diagnosis and therapy of diseases associated with development genes such as diabetes, comprises a sequence of a segment of chemically pretreated DNA of genes associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1384 CACAAATAAAAACCAATATATATCGTAACACCACACTCTATTCATAATTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 CAGGCATAAAATTTGAAATTAAAATTATGAGCTCCATGATATGCTATATTGGTTTTACCTT
                                                                                       Human, development, homeobox gene; HOX; diabetes; cancer; apoptosis; heart disease; epilepsy; histone deacetylation; muscular dystrophy; dwarfism; single nucleotide polymorphism; SNP; cytosine methylation; antidiabetic; cytostatic; antidonvulsant; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
Human chemically modified disease associated gene SEQ ID NO 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 17.8%; Score 40; DB 24; Length 6809; Best Local Similarity 54.9%; Pred. No. 1.6; Matches 79; Conservative 0; Mismatches 65; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6809 BP; 1792 A; 270 C; 1625 G; 3122 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1264 rcaaaacrraarcaraaarrcrir 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 191; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         137 ACAAAACAAAAAAACAACCTTTTT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JUN-2000; 2000DE-1032529
01-SEP-2000; 2000DE-1043826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-JUL-2001; 2001WO-EP07536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the European Patent Office.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-130908/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     with development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200200927-A2
                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
The invention relates to a nucleic acid comprising a sequence of at least 18 bases of a segment of chemically pretreated DNA of genes associated with cell signalling. The activity of the modified sequences of the invention may be described as cytostatic. The object of the invention is to provide the chemically modified DNA of genes associated with cell signalling, as well as oligonucleotides and/or PNA-oligomers for detecting cytosine methylations, as well as a method which is particularly suitable for the diagnosis and/or therapy of genetic and epigenetic parameters of genes associated with cell signalling. The chemically modified DNA provided by the invention is useful for diagnosis and therapy of diseases such as solid tumours and cancer. The sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1384 CACAAATAAAACCAATATATATGTAACACCACACTCTATTCATAATTTCTTTAATTAT 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1324 ACAAAAACTATTTAAATTAAATCCCGTCTATCAATTTTTTCGTTTTACTACAATTACTTT 1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Note: The sequence data for this patent is not represented in the printed specification, but is based on sequence information supplied by the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                77 CAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAAGGAA 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid, useful for diagnosis and therapy of diseases associated with cell signalling e.g. cancer, comprises chemically modified genomic sequences of genes associated with cell signalling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 CAGGCATAAAATTTGAAATTAATGAGGCTCCATGATATGCTATATTGGTTTTACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         given in records ABL70111-ABL70626 represent chemically pre-treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,
0
                                                                                                                                                                                                          Cell signalling; cytosine methylation; cell signalling disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 40; DB 24; Length 6809;
Pred. No. 1.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6809 BP; 1792 A; 270 C; 1625 G; 3122 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 447; 24pp+sequence listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genomic DNA's of genes associated with cell signalling
Note: The sequence data for this patent is not represe
                                                                                                                                                                   Chemically treated cell signalling DNA sequence#224.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1264 TCAAAACTTAATCATAAATTCTTT 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   137 ACAAAACAAAAAAACAACCTTTTT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
                                         ABL70557 standard; DNA; 6809 BP
                                                                                                                                                                                                                                cancer; tumour; cytostatic; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17.8%;
54.9%;
                                                                                                                                                                                                                                                                                                                                                                                                   29-JUN-2001; 2001WO-EP07471.
                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JUN-2000; 2000DE-1032529.
01-SEP-2000; 2000DE-1043826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

Query Match

Best Local Similarity 54....

Best Tocal 79; Conservative
                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            European Patent Office.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-154758/20.
                                                                                                                                                                                                                                                                                                                   WO200202807-A2.
                                                                                                                            01-JUL-2002
                                                                                                                                                                                                                                                                         Unidentified,
                                                                                                                                                                                                                                                                                                                                                        10-JAN-2002.
                                                                                  ABL70557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Olek A,
RESULT 5
ABL70557/c
                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2222X8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                           D X B X S X M M X D X D X Y X Y X D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

```
The invention relates to 224 nucleic acid sequences comprising at least 18 bases of a chemically pretreated gene associated with gene regulation selected from 43 known genes (or complementary sequences). The chemical pretreatment converts cytosine bases unmethylated at the 5-position to uracil or another base with hybridisation behaviour dissimilar to cytosine, to enable. analysis of cytosine methylations. The DNA sequences, oligomers for sets/arrays) and method are useful in the diagnosis of diseases (or predisposition to diseases) associated with gene regulation and in therapy of such diseases, by cascidated with gene regulation and in therapy of such diseases, by associated with gene regulation methylation patterns of such genes, kits are provided. They are especially useful in diagnosis and therapy of e.g. severe combined immunodeficiency disease, cardiac disorders, haemophila, solid tumours and cancer, Werner Syndrome, asthma, HDR Syndrome, Seather Chotzen syndrome, werner syndrome, is a more considered than a provided the constant seament and cancer.
                                                                                                                                                                                                                             severe combined immunodeficiency;
                                                                                                                                                                                                                             Human; Gene regulation-associated gene; severe combined immunodeficiency, cardiac damage; inflammatory response; Haemophila; Werner syndrome; asthma; HDR syndrome; congenital heart defect; Saethra-Chotzen syndrome; renal disease; Preeclampsia; cardiac allograft vascular disease; colorectal cancer; thyroid cancer; oscophageal cancer; ds; tumour; immunostimulant; cardiant; antiinflammatory; coagulant; antiathmatic; nephrotropic; gynecological; anti-tumour; immunosuppressive; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   regulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acid sequences from chemically modified genes associated with gene regulation, useful for analysing cytosine methylations for diagnosis and therapy of diseases e.g. severe combined immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     precolampsia, graft versus-host disease. The present sequence is a sequence included in the sequence data for this specification and associated with the human gene regulation-associated genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 24; Length 6809;
                                                                                                                                                                                    Human gene regulation-associated gene oligonucleotide #169.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Note: The sequence data for this patent did not form part
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6809 BP; 1792 A; 270 C; 1625 G; 3122 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 17.8%; Score 40; DB 2º
Best Local Similarity 54.9%; Pred. No. 1.6;
Matches 79; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID No 173; 26pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Berlin K;
                                               AAS61214 standard; DNA; 6809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000DE-1019173.
2000DE-1032529.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-APR-2001; 2001WO-EP03968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-APR-2000; 2000DE-1019058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-SEP-2000; 2000DE-1043826
                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-017470/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200177375-A2
                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JUN-2000;
                                                                                                                                       29-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-2001
                                                                                            AAS61214;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease
                          AAS61214/c
RESULT 6
```

.. 0

Gaps

.; 0

Indels

65;

16

17 CAGGCATAAAATTTGAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTT

ò

9/

1384 cacaaaraaaaccaararararcgraacaccacacrcrarrcaraarrcriraarrar 1325

17 CAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTT

. 0

Length 6809; Indels

DB 24;

17.8%; Score 40; DB 2 ilarity 54.9%; Pred. No. 1.6; Conservative 0; Mismatches

Query Match Best Local Similarity Lag 79; Conserva

ð 셤

Ŋ

```
1324 acadadactatitidaattadatcccirctatcadrititcititactacdadattactr 1265
                                                                                                                                                                                                                                            Human; signal transduction associated gene; cytosine methylation state;
CpG island; signal transduction associated disease; solid tumour; cancer;
antitumour; cytostatic; mutant; ds.
                                 CAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAA 136
                                                                                                                                                                                                                      Signal transduction associated gene modified DNA #79.
                                                                                               1264 rcaaaacrraarcaraaarrciri 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                               꿌
                                                                            ACAAAACAAAAAACAACCITITI
                                                                                                                                                         宙
                                                                                                                                                      ABK31314 standard; DNA; 6809
                                                                                                                                                                                                                                                                                                                                                                                      30-JUN-2000; 2000DE-1032529.
01-SEP-2000; 2000DE-1043826.
                                                                                                                                                                                                                                                                                                                                                                   29-JUN-2001; 2001WO-EP07472
                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                             Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-147896/19.
                                                                                                                                                                                                                                                                                                                      WO200200926-A2
                                                                                                                                                                                                  23-APR-2002
                                                                                                                                                                                                                                                                                         Bapiens
                                                                                                                                                                                                                                                                                                                                              03-JAN-2002
                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                             137
                                                                                                                                                                            ABK31314;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Olek A,
                                                                                                                                 RESULT 7
ABK31314/c
1D ABK3131
XX
AC ABK3131
XX
DT 23-APR
                                                                                                                                                                                                                                                                                         Homo
            음
                                                   d
                                                                                               셤
                                                                                                                                                                                                                                             ò
                                 ઠે
```

Oligonucleotide for diagnosis and therapy of diseases associated with signal transduction e.g. cancer, comprises chemically modified genomic sequences of genes associated with signal transduction Claim 1; SEQ ID No 157; 24pp; English the present invention relates to chemically modified DNA sequences of signal transduction associated genee. The DNA sequences are chemically modified using a solution of bisulphite, whycogen sulphite or modified using a solution of bisulphite, phycogen sulphite or calls the cyclosine methylation state (CpG islands) of these correspond a method for the diagnosis and/or therapy of genetic and genes, and a method for the diagnosis and/or therapy of genetic and epigenetic parameters of gene associated with signal transduction. The genomic DNA can be obtained from calls or callular components which contain DNA, e.g. call lines, biopsies, blood, sputum, stool, urine, cerebral-spinal fluid, tissue embedded in paraffin such as tissue from eyes, intestine, kidney, brain, heart, prostate, lung, breast or liver, histologic object slides, and all their possible combinations. The sequences of the invention are useful for the diagnosis and therapy of diseases associated with signal transduction, e.g. solid tumours and Bequences of different genes associated with signal transduction, or their complementary sequences.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the cancer. ABK31158-ABK31545 represent chemically pretreated genomic DNA

 \mathbb{R}^{0}

Sequence 6809 BP; 1792 A; 270 C; 1625 G; 3122 T; 0 other;

European Patent Office.

32 AAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTTAG 91

ઠે

```
The present invention describes a gene (I) derived from Buchnera sp. containing the DNA (a) or (b), (a) has a fully defined base pair sequence selected from a table of sequences found in the Buchnera sp. genomic DNA of ABA92787 given in the specification or is a DNA selected from complementary DNA sequences, and (b) is a DNA which hybridises with the DNA (a) and encodes a protein. Also described are: (1) a recombinant vector (II) containing (I); (2) a transformant (III) containing (II); (3) a genomic DNA of Buchnera sp. containing the sequence given in ABA92787; (4) a plasmid derived from Buchnera sp. containing DNA (c) or (d), (c) is a DNA containing a fully defined sequence given in ABA92788 or ABB92789 and (d) is a plasmid which hybridises with a DNA; and (5) a method for the preparation of a protein in which (III) is cultured and the expression protein of the objective protein is collected from the resultant culture. The DNA is useful for developing agricultural chemicals for exerminating cockcaches. The present sequence represents the presents from the present sequence from the containing the sequence from the containing cockcaches. The present sequence from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 640681 BP; 237522 A; 83822 C; 84757 G; 234580 T; 0 other;
                                                                                                                                                                                                                                                                            cockroach-symbiotic bacterium; cockroach extermination;
ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 640681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17.0%; Score 38.2; DB 24;
55.7%; Pred. No. 7.7;
cive 0; Mismatches 58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A genomic DNA of cockroach-symbiotic bacterium
Claim 1; Page 16-230; 237pp; Japanese.
                                                                                                                                                                                                                                                      Buchnera sp. genomic DNA SEQ ID NO:1.
                                                                                                                             BP
                                                                                                                      ABA92787 standard; DNA; 640681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000JP-0107160.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000JP-0107160.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIKA ) RIKAGAKU KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 55.79
Matches 73; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-126043/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention.
                                                                                                                                                                                                                                                                                                                                                                                                       JP2001292771-A.
                                                                                                                                                                                                            27-MAR-2002
                                                                                                                                                                                                                                                                                                                                                             Buchnera sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                               23-OCT-2001
                                                                                                                                                                                                                                                                                              Buchnera;
                                                                                                                                                                                                                                                                                                                    circular;
                                                                                                                                                                  ABA92787;
                                                                                 RESULT B
ABA92787/c
           ద
```

219

```
3267 TAAATAAAATCAAATATACTCAATTCTAACTAATTCTCCCGCTCTCCAAATAACCTTA 6208
 82 GAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAAGGAAACAAA 141
                                                                 142 ACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGA
                                                                                                                                                                      6207 AACAATTTCTATCATTT 6190
                                                                                                                                      202 ATCAATTAGGAATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P-PSDB; AAW94283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9856925-A1
                                                                                                                                                                                                                                                                                                                            07-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bandman O,
                                                                                                                                                                                                                                                                                           AAX05715,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                         RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
                                                                                                                                                                                                                                         AAX05715,
                                                                                                                                                                    g
                                                                   ò
                                                                                                   셤
                                                                                                                                    ò
The present invention provides a number of human immune system associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye disease such as retinopably, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid
                                                   Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal cytosine methylation -
                                                                                                                                                                                                                                                                                                                                                                                               antiarteriosclerotic; antianaemic; cytostatic; nootropic; neuroprotective; anti-HIV, anticonvulsant; ophthalmological; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antiinflammatory; cancer; eye disease; arteriosclerosis; anaemia; acute myeloid leukaemia; Alzheimer's disease; AlDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
                                                                                                                                                                                                                                                                                                                                                                               Human; immune system disease; cytosine methylation; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16.9%; Score 38; DB 24; Length 12393; 49.5%; Pred. No. 5.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 12393 BP; 3484 A; 219 C; 2406 G; 6282 T; 2 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 1236; 32pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                              Human immune system associated gene SEQ ID NO: 1236.
                                                                                                                                                                                                                             .263/c
ABL33263 standard; DNA; 12393 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ilarity 49.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUN-2000; 2000DE-1032529.
01-SEP-2000; 2000DE-1043826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-JUL-2001; 2001WO-EP07537
                                                                                                                                                        198182 AAGATTTTTA 198172
                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                        AACCTTTTAA 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ບ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Piepenbrock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-130909/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
les 98; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200200928-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                            26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JAN-2002
                                                                                                                      152
                                                                                                                                                                                                                                                                            ABL33263;
                                                     92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene; da
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Olek A,
                                                                                                                                                                                                         RESULT 9
ABL33263/
ID ABL3
XX
AC ABL3
XX
CY
AC ABL3
XX
                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                      셤
                                                     à
                                                                                                                      ò
```

```
Disease), and in the stimulation of cell proliferation. Antagonists of the protein are useful in treating inflammation (e.g. Addison's disease, allergies and anemia), and disorders associated with cell proliferation (including various cancers like leukemia, and cancers affecting bone, breast and brain). Complementary polymucleotides are useful in detecting polymucleotides that encode PROPHO, useful in the diagnosis of conditions activation or induction of various cancers. PROPHO is useful in producing antibodies or screening libraries of pharmaceutical agents in order to identify those that bind to PROPHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This DNA encodes a human protein phosphatase (PROPHO). Host cells containing a vector comprising the PROPHO nucleic acid are used for the recombinant production of the protein. PROPHO forms a composition in the treatment or prevention of apoptosis-related disorders (e.g. Acquired Immune Deficiency Syndrome (AIDS), Alzheimer's Disease and Parkinson's
                                                                                                                                       Protein phosphatase; PROPHO; apoptosis; AIDS; Alzheimer's Disease; Acquired Immune Deficiency Syndrome; Parkinson's Disease; inflammation; cell proliferation; Addison's disease; allergy; anemia; cancer; bone; leukemia; breast; brain; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New substantially purified human protein phosphatase (PROPHO) - useful in the diagnosis, prevention or treatment of inflammation, cancer, and disorders associated with apoptosis
                                                                                                                                                                                                                                                                                                                       /product= "protein phosphatase (PROPHO)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2270 BP; 693 A; 344 C; 515 G; 716 T; 2 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ï
                                                                                                         Human protein phosphatase (PROPHO) encoding DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lal P,
                                                                                                                                                                                                                                                                  Location/Qualifiers
70..1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 5; Fig 1A-G; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goli SK,
AAX05715 standard; DNA; 2270 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US11614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .97US-0873093
                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INCY-) INCYTE PHARM INC
                                                                                                                                                                                                                                                                                                         /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Corley NC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1999-080906/07.
```

6387 AAAAAACTTAAAAAAAAAAATTTAAAAAATAATTTAAAATAAAACTTTTTCCTTTAAAA 6328

음.

ठ

22 ATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAA

81

.. 0

Indels

Mismatches 100;

ö

```
ö
                                                                                                                                                              2137 GAATAATACATAGGTTTTTCAAAAGTTATGTTTCATAAAGAATACAGAAAAGGAAAAT 2078
                                                                                                                                89 TAGTITCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAAAAA 148
                                                               29 TTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTTACCTTCAGAAGAATATT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AAL07544-AAL26789) and methods of assessing whether a patient is afflicted with breast cancer by examining the correlation between the expression of certain markers and the cancerous state of breast cells. The polynucleotides and encoded polypeptides are potential markers for detecting, diagnosing, monitoring, characterising treating and potentially preventing breast cancer. The polynucleotides and encoded polypeptides are also useful for isolating compounds with cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention relates to human breast cancer expressed polynucleotides
                                                                                              Trgacaracarrirgargreragriagecraracagaararacaaaccaaagcrerar
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New peptide useful as a marker for the diagnosis of breast cancer
                                  ö
Length 2270;
                                71; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 778 BP; 220 A; 134 C; 180 G; 244 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                               Human breast cancer expressed polynucleotide 14319.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; breast cancer; cell marker; cytostatic; ss.
 DB 20;
                                                                                                                                                                                                                               2077 AGCCACACATCACTCACAACTTCTAA 2047
                                                                                                                                                                                                 AACAACCTTTTTAAGAGTTGATGGCTACTCA 179
Score 37.4; DE
Pred. No. 5.8;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 2564-2565; 3695pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Xu Y, Wang Y, Steinmann K;
                                                                                                                                                                                                                                                                                                              AAL21862 standard; cDNA; 778 BP
 16.6%;
53.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JAN-2000; 2000US-0176077.
14-MAR-2000; 2000US-0189167.
24-MAR-2000; 2000US-0192099.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAR-2000, 2000US-0193480.
15-MAY-2000, 2000US-0205230.
09-JUN-2000, 2000US-0211315.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-JAN-2001; 2001WO-US00798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0220534
                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match
Best Local Similarity 55.4*
Best Local Similarity 55.4*
T2; Conservative
               l Similarity 53.0
80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-451856/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200151628-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                 07-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lillie J,
                                                                                                                                                                                                 149
                                                                                               2197
                                                                                                                                                                                                                                                                                                                                                AAL21862;
 Query Match
Best Local (
                                                                                                                                                                                                                                                                               RESULT 11
                                                                                                                                                                                                                                                                                                AL21862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                ठ
                                                                                                                                                                                               ò
```

```
Growth arrest gene; B4B gene; cell proliferation; cancer; leukaemia; marker; gene therapy; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     used to isolate a genomic fragment localised to the B4B gene to chromosome 20q12-q13.1. The isolated clone can be used to express the growth arrest protein in host cells. Introduction of a functional B4B allele (by gene therapy) into a cell with a defective allele may be used to prevent development of pro-B-cell leukaemia or other malignancies. Introduction of the isolated DNA in a vector that includes a suicide inhibition cassette can be used to arrest expansion of cells, in vivo or in vitro, e.g. useful in skin cell grafts and in lymphocytes containing a heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      codes for to the B4B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cells - and related vectors, transformed cells and protein expressed in B for, e.g. gene therapy of leukaemia or diagnosis of cancer and immune status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This cDNA clone, the coding region of which is claimed, codes for a growth arrest protein (see AAW46489). It corresponds to the B4B gene, expression of which results in inhibition of callular proliferation. Human peripheral blood mononuclear calls were fractionated to recover high, intermediate and low density fractions. CDNA libraries from all 3 fractions were subjected to a differential display PCR. Bands unique to the intermediate density eample were reamplified, cloned and sequenced. A 101 bp insert was used to screen a cDNA library from intermediate density cells to isolate the 2.7 kb cDNA clone. This insert was
                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
123. 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ACTI-) ACTIVATED CELL THERAPY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a
/note= "(Claim 4)"
                                                                                                                                                                                                                    AAV05164 standard; cDNA; 2705 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ruegg CL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; Fig 1; 26pp; English
                                                                                                                                                                                                                                                                                                                Human growth arrest gene B4B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96US-0021874
                                                                                                                                                                                                                                                                                (first entry)
                                                                                                          147 AAAACAACCT 156
                                                                                                                                      AAAAGTACCT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Engleman EG, Laus R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-086969/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAW46489
                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9800544-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUN-1996;
                                                                                                                                                                                                                                                                                06-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JAN-1998
                                                                                                                                      16
                                                                                                                                                                                                                                                  AAV05164;
                                                                                                                                                                                      RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                       AAV05164
                                                                     g
                                                                                                                                                                                                                                                  ò
                                                                                                         ò
                                                                                                                                      g
```

ö

Gaps

ö

58; Indels

0; Mismatches

Score 37.2; DB 22; Length 778; Pred. No. 5.7;

16.5%; 55.4%;

27 ATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATA 86

ö

Gaps

. 0

Indels

0; Mismatches 66;

Query Match
Best Local Similarity 53.5%;
Matches 76; Conservative

Score 36.4; DB 24; Length 345; Pred. No. 8;

Sequence 345 BP; 97 A; 61 C; 48 G; 139 T; 0 other;

96

homologous or related genes, to produce compositions that modulate expression or function of the encoded protein, to map functional regions of the protein, to study associated physiological pathways, to genetically manipulate cells and plants. The encoded products are useful to screen for biologically active agents such as fungicides or insecticides and to elucidate biochemical pathways.

The invention relates to a novel nucleic acid of Arabidopsis thaliana comprising a sequence capable of hybridising under stringency to one of the 999 sequences referred to but not defined in the specification (ABQ85131-ABQ86129). The nucleic acid sequences are useful to identify

72 ACCTICAGAAGAATATITAGTITCACTCAGGTITTTCAAAGCTACGCTGTCCCCCAAAAA 131

155 TGTATTACCTAAGACAATAAATATGATTTATGAATAAAACTAATTTGAATTACTGCATAT 12 TGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTT

95 GAAATTATAAATCTTTTGTTTTAATCTCAAGATGTAATAATTTATGATCTTCACATAAAA 36

සු

ò

8

ò

```
98
                                                                                                     39 TTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACT
                                                                                                                                                        Gaps
                                                                                                                                  ch 16.3%; Score 36.6; DB 19; Length 2705; Similarity 57.4%; Pred. No. 9.3; 66; Conservative 0; Mismatches 49; Indels 0;
                                                                                                                                                                                                                                                                               Arabidopsis thaliana expressed polynucleotide SEQ ID NO 772.
                                                                                                                                                                                                                                                                                                    Plant; Arabidopsis; transgenic; fungicide; insecticide; ds
                      Sequence 2705 BP; 729 A; 584 C; 627 G; 765 T; 0 other;
cytokine gene for in vivo expression.
                                                                                                                                                                                                              ABQ85902 standard; DNA; 345 BP
                                                                                                                                                                                                                                                                                                                                                                                                                  27-JAN-2000; 2000US-178480P
                                                                                                                                                                                                                                                                                                                                                                                           26-JAN-2001; 2001US-0770791
                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           HAMILTON C M.
PRICE J L.
RAINES T M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MATHEW A V.
LEDFORD B L.
WOESSNER J P.
                                                                                                                                                                                                                                                                                                                          Arabidopsis thaliana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RAMEAKA J G.
                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                        GORLACH J.
                                                                                                                                                                                                                                                                                                                                                US2002062014-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAGE A.
                                                                                                                                                                                                                                                          05-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                       23-MAY-2002
                                          Query Match
Best Local S
                                                                                                                                                                                                                                    ABQ85902
                                                                                                                                                                                                                                                                                                                                                                                                                                      (GORL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RAIN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RAME/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PAGE/)
                                                                                                                                                                                         RESULT 13
                                                                                                                                                                                                    BQ85902,
                                                                                       .
8
                                                                                                            윱
                                                                                                                                                                                                                                                ઠે
                                                                                                                                                        g
```

```
The invention relates to a novel method for diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma or metastatic liver tumour in a patient, and differentiating metastatic liver cancer from hepatocellular carcinoma in a patient, involving detecting the level of expression of two or more genes represented in ABN93503-ABN97455 in a tissue sample. The method of the invention has hepatotropic, and
                                                                                                                                                            Gene; liver cancer; ds; hepatocellular carcinoma; hepatotropic; metastatic liver tumour; cytostatic; expression profile; diseasé state; disease progression; drug toxicity; drug efficacy; drug metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eparocellular carcinoma or metastatic liver tumor in a patient, involves detecting the level of expression of two or more genes in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Diagnosing and detecting the progression of liver cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                     Vockley JG;
                                                                                                                                Gene #1661 used to diagnose liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Peres-Da-Silva S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 1661; 298pp; English.
                                BP
                                ABN95163 standard; DNA; 1479
                                                                                                                                                                                                                                                                                                                                    02-OCT-2001; 2001WO-US30589.
                                                                                                                                                                                                                                                                                                                                                                     02-OCT-2000; 2000US-237054P.
                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                      (GENE-) GENE LOGIC INC
                                                                                                                                                                                                                                                                                                                                                                                                                                     Alvares C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      liver tissue sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-426119/45
                                                                                                                                                                                                                                                                  WO200229103-A2.
                                                                                                 13-AUG-2002
                                                                                                                                                                                                                                                                                                   11-APR-2002
                                                                 ABN95163;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Horne D,
RESULT 14
               ABN95163
```

New nucleic acid sequences of Arabidopsis thaliana and their encoded products are useful to produce transgenic plants, to screen for biologically active agents such as fungicides and insecticides and in

Claim 1; SEQ ID NO 772; 18pp + Sequence Listing; English

genetic studies

Yu Y; JP, Haas WD;

Price JL, Raines TM, Ledford BL, Woessner Davis KR, Allen K,

Hamilton CM, Pr A, Mathew AV, I r M, Slater T,

Kricker M,

WPI; 2002-479265/51

An Y, Ha Page A,

Gorlach J, A Rameaka JG, Garcia CA, K

Hurban P;

GARCIA C A. KRICKER M.

SLATER T.

HAAS W D.

(MOES/) (HAAS/) DAVIS K R. ALLEN K.

HOFFMAN N. HURBAN P.

(HOFF/) (HURB/)

(ALLE/)

Hoffman N;

cytostatic activity. The method is useful for diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma and metastatic liver carcinoma in a patient. The method is useful for identifying expression profiles which serve as useful diagnostic markers as well as markers that can be used to monitor disease states, disease progression, drug torfacilty, drug efficacy and drug metabolism.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO Sequence 1479 BP; 432 A; 287 C; 266 G; 493 T; 1 other; at ftp.wipo.int/pub/published_pct_sequences. Best Local Similarity Query Match Matches 888888888888888 ઠે 요

128 AAAAACGAAACAAAAAAAAAAAAAACTTTTTAAGAGTTGATGGCTACTCTTTGATCT 187 834 AGAAAAGAAACAAACAAAATCGACCCTTTAATTATTACTTGCAACTCAACAGATCT 893 DB 24; Length 1479; 36; Score 36.4; D Pred. No. 9.6; 0; Mismatches 16.2%; 58; Conservative

ö

Gaps

ö

Indels

894 cécreceracrecerrecageaacriracri 927

188 GCCTCCTCTGCTGAATCAATTAGGAATTTTTTT 221

ABK40070 standard; DNA; 7924 BP

21-MAY-2002 (first entry) ABK40070;

Human; ds; bisulphite treatment; CpG; DNA methylation; cancer; tumour; cytostatic; ALDH6; CYP1181; CYP3A3; DPYD; EPHX2; OCLN; TXNRD1; UGT8; MRP; pharmacogenomics; SNP; single nucleotide polymorphism.

Human chemically pretreated gene sequence #76 strand 2.

Homo sapiens

WO200202806-A2

10-JAN-2002

29-JUN-2001; 2001WO-EP07470

30-JUN-2000; 2000DE-1032529 01-SEP-2000; 2000DE-1043826

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, Olek A,

WPI; 2002-154757/20

New nucleic acid, oligonucleotides and peptide nucleic acid-oligomers, useful for detecting cytosine methylation state of genes assowith pharmacogenomics and for therapy of diseases e.g. cancer Claim 1, SEQ ID No 152; 24pp; English. for detecting neeful

The invention relates to a nucleic acid comprising a sequence at least 18 bases in length of a segment of the chemically pretreated DNA of genes associated with pharmacogenomics according to one of the sequences of the genes ALDHE (NM 000693), CYP11A (NM 000491), CYP13A (NM 000776 and NM 017460), DPYD (NM 000110), EPHX2 (NM 001999), OCLN (NM 00776 and NM 017460), DPYD (NM 001110), EPHX2 NM 001999), OCLN (NM 019900, NM 019901, NM 019902, NM 019862, NM 019898, NM 019899) and their complementary sequences, or a Sequence (SI) chosen from 87 sequences and their complements. The chemical pretreatment is bisulphite treatment to convert cytosines (but not methyl-cytosines) into uracils. Also included are an oligomer (II) in particular an

3179 CAATAAATTATTTACCTCTACTCATAATTAATTAACCCTTCCCAAATTACAAAA 3120 ò each case at least one base sequence having a length of 9 nucleotides which hybridises to or is identical to a chemically precreated DNA of genes associated with pharmacogenomics and their complements, arranged in a array for analysing diseases associated with the methylation state (CpG) and/or detecting SNPs (single nucleotide polymorphisms) of the 87 sequences. The oligomers may also be used as PCR primers. The set of 87 nucleic acids and their complements is useful for diagnosis and therapy of solid tumours and cancer. The present sequence represents one the 87 DNA sequences or its complement.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at Etp.wipo.int/pub/published_pct_sequences. 77 CAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAA 136 or a peptide nucleic acid (PNA) -oligomer, comprising in Gaps . 0 DB 24; Length 7924; 31; Indels Sequence 7924 BP; 1973 A; 83 C; 1827 G; 4041 T; 0 other; Score 36.4; DE Pred. No. 12; 0; Mismatches 3119 ATAAAACGAAAAACGACCTTATTCA 3094 137 ACAAAACAAAAAAAAAAACAACCTTTTTAA 162 16.2%; Query Match Best Local Similarity 64.0 Matches 55; Conservative oligonucleotide ઠે 셤 ò a

Search completed: June 7, 2003, 20:37:22 Job time : 299 RAFE

THIS PAGE BLANK (USPTO)

```
June 7, 2003, 17:27:51; Search time 898 Seconds (without alignments) 7291.906 Million cell updates/sec
                                                                                                                                       US-09-765-231A-58
225
1 tgatggtaagttgtttcagg.....attaggaattttttttt 225
                                                                                                                                                                                                                                                                         4109280
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                   al number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                          2054640 segs, 14551402878 residues
                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                    OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_htgo_mus:*
em_htgo_other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tgo_hum: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 em_un:*
em_vi:*
em_htg_hum:*
                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           em_htg_other:
                                                                                                                                                                                                                                                                                                                                                                                            GenEmbl: *
1: 9b ba: *
2: 9b htg: *
1: 9b om: *
1: 9b om: *
2: 9b pat: *
9b pl: *
9b pl: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gb_ro:
gb_sts:
gb_nn:
gb_vi:
em_ba:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *: WO
                                                                                                                                         Title:
Perfect score:
Sequence:
                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                           Searched:
                                                                                     Run on:
```

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

scription	1128	linear PAT 30-AUG-2001 Vertebrata; Euteleostomi; ; Hominidae; Homo. and Ma,X.J.
DB ID	6 AX202128 2 AC011875 2 AC011875 2 AC011875 2 AC011875 3 C117269 2 AC014893 10 AC117237 2 AC013420 2 AC013420 3 AC013420 4 AC013420 5 AC013420 5 AC013420 6 AX323692 6 AX323692 8 AC012324 8 AC013548 8 AC013548 8 AC013548 8 AC013548 8 AC013548 8 AC013548 8 AC013548 8 AX251912 8 AX21912 8 AX34899 9 PPMALIP3 2 AC013848 6 AX34899 9 AX34899 9 AX34899 12 AC013848 13 AC013548 14 AC013548 15 AC013548 16 AX3410 17 AC013548 18 AC013548 18 AC013548 19 AC013548 10 AC013548 2 AC103611 2 AC103611 2 AC013548 3 AC013548 6 AX34899 9 AX34899 9 AC081965 10 AC08081 10 AC08081	225 bp DNA 1919 Chordata; Craniata; Primates; Catarrhini hakamur,G., Dotson,S.
% Query Match Length	10000 100000 100000 100000 100000 100000 100000 100000 100000 1000000 1000000 100000 100000 100000 100000 100000 100000 1000000	John Strom Strom Strom Strom Strom Strom Strom Strong Stro
Result No. Score	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RESULT 1 AX202128 LOCUS LOCUS LOCUS AX20 DEFINITION Seq ACCESION AX21 VERSION AX21 VERSION AX20 KEYWORDS SOURCE ORGANISM HOME BUKK MAMM TEFFERENCE I AUTHORS Phil

셤

유

```
12186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 56823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S Birren, B., Lintcon, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baldwin, J., Barna, N., Beckerly, R., Boguslavkiy, L., Boukhgalter, B., Baldwin, J., Barna, N., Beckerly, R., Boguslavkiy, L., Boukhgalter, B., Brown, A., Castle, A., Colamoelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Dewar, K., Domino, M., Donelan, L., Doyle, M., Ferreira, P., FitzHugh, W., Forrest, C., Funke, R., Gage, D., Gardyna, S., Gardyn, G., Hagoes, B., Heaford, A., Horton, L., Howland, J.C., Johnson, R., Gane, C., Kann, L., Karatas, A., Klein, J., Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Marquis, N., McEwan, P., McGurk, A., McKernan, K., McLaughlin, J., Meldrim, J., McGurk, A., McKernan, C.H., O'Connor, T., O'Connell, P., Peterson, K., Pollara, V., Siley, R., Santos, R., Severy, P., Stange-Thomann, N., Stojanovic, N., Subramanian, A., Talamas, J., Tesfaye, S., Tirrell, A., Vassiliev, H., Vo, A., Wheeler, J., Wu, X., Wyman, D., Ye, W. J., Zimme, A. and Zody, M., Wheeler, J., Wu, X., Direct, Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AC011875 143800 bp DNA linear HTG 12-MAR-2000
Homo sapiens clone RP11-16K5, WORKING DRAFT SEQUENCE, 26 unordered
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCCCCAAAAAACGAAACAAAAAAAAAAAAACAACTTTTTAAGAGTTGATGGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATTGGTTTTTACCTTCAGAAGAATATTTAGTTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (15-OCT-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Feb 28, 2000 this sequence version replaced gi:6453961.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Ammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
[ (bases 1 to 143800)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ------ Genome Center
Center: Whitehead Institute/ MIT Center for Genome Research
Center code: WIBR
                                                                                                                                                                                                                                                                                                                                                                                                                             1 reargeraagriciticagecaraaaarrigaaaraaarrargagecreeargararger
                                                                                                                                                                                                                                                                                                                                                                           TGATGGTAAGTTGTTTCAGGCATAAATTTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                            Length 225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIGATCIGCCICCICTGCIGAATCAATTAGGAATTITITITIT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        All repeats were identified using RepeatMasker:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ixren,B., Linton,L., Nusbaum,C. and Lander,E.
omo gapiens, clone RP11-16K5
                                                                                                                                                                                                                                                         100.0%; Score 225; DB 6;
100.0%; Pred. No. 2e-40;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Web site: http://www-seg.wi.mit.edu
Patent: WO 0153531-A 58 26-JUL-2001;
Pharmacia Corporation (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A.F.A. & Green, P. (1996-1997)
                                                                                                                                                                          80
                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
38 c 35 g 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AC011875.3 GI:7107950
4TG; HTGS PHASE1; HTGS DRAFT.
Homo sapiens.
                                                                                                                                                                    35 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 143800)
                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  domo sapiens
                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 225; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C011875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                          source
                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
AC011875/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
```

```
NOTE: This is a 'working draft' sequence. It currently consists of 26 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will
                                                                                                                                                                             Quality coverage: 3.7 in Q20 bases; agarose-fp
Quality coverage: 3.7 in Q20 bases; sum-of-contigs
                                                                of reads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09: gap of 100 bp
92865: contig of 16056 bp in length
65: gap of 100 bp
06278: contig of 13313 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             106279 106378: gap of 100 bp
106379. 123041: contig of 16663 bp in length
123042 123141: gap of 100 bp
                                                            chemistry: Dye-terminator Big Dye; 100% of re
Assembly program: Phrap; version 0,9860731
Consensus quality: 93387 bases at least 040
consensus quality: 115701 bases at least 030
Consensus quality: 115701 bases at least 030
Insert size: 141000; agarose-fp
Insert size: 141300; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                  100 bp
f 1835 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                   100 bp
1189 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100 bp
E 1998 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100 bp
1956 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              p of 100 bp
contig of 8932 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                     100 bp
1325 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0 bp
1892 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      p of 100 bp contig of 2389 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19: gap of 100 bp 20135: contig of 2116 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        p of 100 bp contig of 3515 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         p of 100 bp contig of 2944 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          p of 100 bp
contig of 2588 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            p of 100 bp
contig of 3592 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         p of 100 bp contig of 1911 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          35285: gap of 100 bp 39745: contig of 4460 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             p of 100 bp contig of 4377 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          p of 100 bp contig of 4668 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             p of 100 bp contig of 8700 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               contig of 9787 bp in length
                                                                                                                                                                                                                                                                                                                                                                    1029: contig of 1029 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1077 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       p of 100 bp contig of 2329 bp in length
             Center clone name: 16 K 5
----- Summary Statistics
Sequencing vector: M13; M77815; 100% of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       00 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         contig of 1
                                                                                                                                                                                                                                                                                                                                                                                                     contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10945: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                      contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      contig of
Center project name: I
Center clone name: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13001; co-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            con,
23750:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             con
J: gap of
44222:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _____ gap of 48990:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                con.
24: gap of
76709:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5431 15530; gap of 17919; cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29582: gap of
33174: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92965: gap of
106278: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13101: gap of
15430: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23850: gap of 26794: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74: gap of
35185: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             49090: gap of
57790: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5: gap of
8847: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94: gap of
29482: con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90: gap of
66822: con
                                                                                                                                                                                                                                                                                                                                                                                       gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gap of
                                                                                                                                                                                                                                                                                                                                                                                                                          gap
                                                                                                                                                                                                                                                                                                                                                                                                       2964:
                                                                                                                                                                                                                                                                                                                                                                                                                                      4253:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5678:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6855:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0946 11045:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18019:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26894:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             39845:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57890:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66922:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76809:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            44322:
                                                                                                                                                                                                                                                                                                                                                                                     1030 1129:
                                                                                                                                                                                                                                                                                                                                                                                                                      365 3064:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     254 4353:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5778:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6955:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8947:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             33274
                                                                                                                                                                                                                                                                                                                                                      be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               39746
```

180

```
Hattori,M., Tabli,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Pujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Lubblished Only in DateBase (1999)

2 (bases 1 to 186962)

3 Hattori,M., Ishli,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Pujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Direct Submission

1. Submitted (06-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suehiro-chou,Tarumi-Ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattoriogasc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)

1. Location/Qualifiers
                               акочовчв 186962 bp DNA linear PRI 21-JUN-2001
Homo sapiens genomic DNA, chromosome 11q, clone:RP11-775D16,
complete sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (sites)
                                                                               121 TCCCCCAAAAAACGAAACAAAAAAAAACATACTTTTTAAGAGTTGATGGCTACTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83181 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 186962;
                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 225; DB 9;
100.0%; Pred. No. 5.7e-41;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                        Homo sapiens DNA, clone:RP11-775D16.
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="RP11-775D16"
a 37204 c 36384 g 56015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="11"
                                                                                                                                                                                                                                                                                                                            AP000848.4 GI:14517575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 225, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57359
                  61
                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                            RESULT 3
AP000848/c
                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
FEATURES
                                               임
                                                                               ò
                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 143800;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2504 others'
2 143800: contig of 20659 bp in length.
Location/Qualifiers
                                                                                         /clone lib="RPCI-11 Human Male BAC"
1. .1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
100.0%; Score 225; DB 2;
Best Local Similarity .100.0%; Pred. No. 5.9e-41;
Matches 225; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="assembly_fragment"
ature 123142. 143800
fnote="assembly_fragment"
43074 a 27702 c 27628 g 42892 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26895. .29482 // note="a88embly_fragment" 29583. .33174 // note="a88embly_fragment" // note="a88embly_fragment"
                                                                                                                                                                         1065. .4253
/note="agsembly_fragment"
                                                                                                                                                                                                                                                                                                      948. .10945
note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6810. .92865
note="assembly_fragment"
                                                                                                                                           1130. .2964
/note="assembly_fragment"
                                                                                                                                                                                                         .354. .5678
note="aggment"
                                                                                                                                                                                                                                        779. .6855
note="aggembly_fragment"
                                                                                                                                                                                                                                                                         ;956. .8847
/note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                     ote="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                   note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1851. .26794
note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9091, .57790
note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note="aggembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                  ote="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                       lote="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ote="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9846. .44222
note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lote="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3275. .35185
note="aggment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               )2966. .106278
/note="assembly_fragment
                                           /organisma"Homo sapiens"
/db_xref="taxon:9606"
/clone="RP11-16K5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /ector_side:right"
[06379] .123041
                                                                                                                                                                                                                                                                                                                                         1046. .13001
                                                                                                                                                                                                                                                                                                                                                                         3102. .15430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1323. .48990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lone_end:T7
123142
                                                                                                             misc_feature
                                                                                                                                           misc_feature
                                                                                                                                                                           misc_feature
                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
ORIGIN
               PEATURES
```

RESULT

1 TGATGGTAAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGCT

ઠ

181

ò

ö 9

Gaps

ö

0; Indels

83122

.. 0

AP001320

```
arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                      NOTE: This is a 'working draft' sequence. It currently consists of 32 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88998 89898; Contig of 100 bp
88998 89882; Contig of 10273 bp in length
99563 99462; gap of
103434 103533; gap of
103434 103533; gap of
103534 109064; contig of 3971 bp in length
109165 109164; gap of
109165 113855; contig of 4691 bp in length
109165 113855; contig of 4691 bp in length
113866 119355; gap of
113956 119140; contig of 5185 bp in length
119241 119240; gap of
119241 119240; gap of
119241 119240; gap of
119241 119240; gap of
119341 119341; contig of 2061 bp
113138 131378; gap of
1190 bp
113138 131378; gap of
1190 bp
113138 131378; gap of
1190 bp
113138 131378; gap of
1100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          147221 144819: gap of 100 bp 144820 149031 149130: gap of 100 bp 149131 149130: gap of 100 bp 149131 151134: contig of 2004 bp in length 151135 151234: gap of 100 bp 151235 153751: contig of 2517 bp in length 153752 153851: contig of 2517 bp in length 153752 156504: gap of 100 bp 153650 156604: gap of 100 bp 156605 156604: gap of 100 bp 156605 156604: gap of 100 bp 156605 1556073: contig of 2979 bp in length 156605 1556073: contig of 2979 bp in length 156605 1556073: contig of 2979 bp in length
                                                                                                                                      length
length
                                                                                  ength
                                                                                                                                                                                                                                               length
length
                                                            ength
                                                                                                                ength
                                                                                                                                                                                           length
                                                                                                                                                                                                                         length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47579: gap of 100 bp 57756: contig of 10177 bp in length 57856: gap of 100 bp 100 bp 69526: gap of 100 bp 80185: contig of 10659 bp in length 80185: contig of 10659 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34102 34201: gap of 100 bp
34202 47479: contig of 13278 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15732: contig of 15732 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15733 15832: gap of 100 bp 1
15833 34101: contig of 18269 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161769: gap of 100 bp
164135: contig of 2366 bp in length
164235: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80285: gap of 100 bp 88989: contig of 8704 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159584 159683: gap of 100 bp
159684 161669: contig of 1986 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165854: contig of 1619 bp in length
                                                                                                                                      i
i
i
        142124 142223: gap of 100 bp 142224 144719: contig of 2496 bp
                                                                                                                                                                                                                      1451
1140
1168
                                                                                     1986
151235 153751 contig of 153852 156504 contig of 156605 159584 contig of 156684 contig of 161770 164135 contig of 16436 168954 contig of 165955 167995 contig of 167896 168771 contig of 17042 171562 contig of 171663 172880 contig of 172880 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  164235: gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161770
164136
164236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69527
80186
80286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         47480
47580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOTE: This is a 'working draft' sequence. It currently consists of 32 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved
                        AP001320 172830 bp DNA linear HTG 30-MAY-2000 Homo sapiens chromosome 11 clone RP11-79904 map 11q14, WORKING PRAFT SEQUENCE, 32 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hattori, M., Ishii, K., Toyoda, A., Taylor, T.D., Hong-Seog, P., Fujiyama, A., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y. Direct Submission
Submitsed (01-MAR-2000) Masahira Hattori, The Institute of Physical and Chemical Research (HKEN), Genomic Sciences Center (GSC), Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555, Japan (E-mail:hattori@gsc.riken.go.jp,
                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                1 (Dases 1 to 172830)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama, A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Homo sapiens 172,830 genomic DNA of 11q14
Published Only in DataBase (2000)
2 (bases 1 to 172830)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    On May 30, 2000 this sequence version replaced gi:7209763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chemistry: Dye-terminator ET-amersham, 100% of reads Assembly program: Phrap, version 0,990329 Consensus quality: 145836 bases at least Q40 Consensus quality: 159404 bases at least Q30 Consensus quality: 165408 bases at least Q30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Insert size: 169730; sum-of-contigs
Quality coverage: 4.17x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     URL:http://hgp.gsc.riken.go.jp,
Fax.81-42-778-9924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ------ Genome Center
Center: RIKEN Genomic Sciences Center(GSC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ii ii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           44444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            抗抗
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                äää
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            üü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                üü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15732
18269
13278
10177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10273
3971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4691
5185
2061
2061
4415
3641
2956
2496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4211
2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5531
                                                                                                                                         AP001320.2 GI:8117247
HTG; HTGS PHASE1; HTGS_DRAFT.
HOMO Sapiens DNA, clone:RP11-79904
HOMO Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Center code: RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15732
34101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47479
57756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            131337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         113855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   126822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           149030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   151134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     103433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                138134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15833
34202
47580
57857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                135179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            138235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .03534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26923
                                                                                                                AP001320
                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
```

COMMENT

```
Dipublished

Stren, B., Linton, L., Nusbaum, C., Lander, E., Abraham, H., Allen, N., Balaren, J., Barne, N., Beder, F., Bogguslavkiy, L., Boukhgalter, B., Brown, A., Burkett, G., Campopiano, A., Castle, A., Chopel, Y., Colangelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Dewar, K., Dodge, S., Domino, M., Doyle, M., Fenestor, J., Ferreira, P., FitzHugh, W., Forrest, C., Gage, D., Galagan, J., Gardyna, S., Ginde, S., Goyette, M., Graham, L., Karatas, A., Howland, J.C., Illev, I., Johnson, R., Heaford, A., Horton, L., Karatas, D., Landers, T., Largoque, K., Johnson, R., McRann, L., Karatas, A., Klein, J., Landers, T., Largoque, K., Johnson, R., McRann, C., Luu, G., Lock, K., McRernan, K., McPheeters, R., Medrim, J., Mardonald, P., Marquis, N., McGarthy, M., McRann, C.H., O'Connor, T., O'Donnell, P., O'Neil, D., Olivar, T.M., Peterson, K., Pierre, N., Pisani, C., Pollara, V., Raymond, C., Severy, P., Spencer, B., Stange-Thomann, N., Satos, R., Schauer, S., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Tirrell, A., Traversi, M., Trigilio, J., Vassiliev, H., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Zainoun, J., Zimmer, A. and Zody, M.
                                                                                                                                                                                         คนบรรม84
Homo sapiens chromosome 11 clone RP11-589112 map 11, LOW-PASS
SEQUENCE SAMPLING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 75002)
Birren, B., Linton, L., Nusbaum, C. and Lander, E.
Homo sapiens chromosome 11, clone RP11-589112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (14-FEB-2000) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Jul 13, 2000 this sequence version replaced gi:6970532. All repeats were identified using RepeatMasker: Smit, A.F.A. & Green, P. (1996-1997) http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Center: Whitehead Institute/ MIT Center for Genome Research
Center code: WIB Center code: Web site: http://www-seq.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            * NOTE: This record contains 88 individual

* sequencing reads that have not been assembled into

* contigs. Runs of N are used to separate the reads

* and the order in which they appear is completely

* arbitrary. Low pass sequence sampling is useful for

* identifying clones that may be gene-rich and allows

* overlap relationships among clones to be deduced.

* However, it should not be assumed that this clone

* will be sequenced to completion. In the event that

* the record is updated, the accession number will
       29089 TTTGATTTGCCTCCTGTGCTGGATCACATTAGGGATTTTTCTTTTT 29134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: sequence_gubmissions@genome.wi.mit.edu
Conter: Project Information
Center project name: 15114
Center clone name: 589_I_12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 724: contig of 724 bp in length
725 824: gap of 100 bp
825 1573: contig of 749 bp in length
1574 1673: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                           AC023384.2 GI:9144035
HTG; HTGS_PHASE0.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                       RESULT 5
AC023384
                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29029 GTCCCCCCAAATACGGAACCAAAACCACCCTTTTAAGAGTTGATGGTAATCA 29088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 ATATIGGITITACCTICAGAAGAATATITAGITICACTCAGGITITICAAAGCT-ACGCT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCCCCCAAAAAACGAAACAAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCA 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="assembly_fragment clone_end:T7 vector_side:right"
126923, .131337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        note="assembly_fragment clone_end:SP6 vector_side:left"
03534, 109064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 78.0%; Score 175.6; DB 2; Length 172830; Best Local Similarity 88.9%; Pred. No. 6e-30; Matches 201; Conservative 0; Mismatches 24; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180 TITGAICTGCCTCCTCTGCTGAATCAATTAGGAATTTTTTTTT 225
165855 165954: gap of 100 bp 165955 167495: contig of 1541 bp in length 167496 167595: gap of 100 bp 167596 168771: contig of 1176 bp in length 168772 168871: gap of 100 bp 168872 170322: contig of 1451 bp in length 170323 170422: gap of 100 bp 171563 171562: contig of 1140 bp in length 171563 171662: gap of 100 bp 171563 171662: gap of 100 bp 171663: gap of 171663: gap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /noce="assembly_fragment"
113956. .119140_/note="assembly_fragment"
/note="assembly_fragment"
119241. .124661
/note="assembly_fragment"
124762. .126822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15833. .34101
/note="assembly_fragment"
34202. .47479
/note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note="assembly_fragment"
09165. .113855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="assembly_fragment"
142224. .144719
/note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57857. .69426
/note="aggembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note="assembly_fragment"
(31438, .135078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="assembly_fragment"
138235. .142123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note="aggembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69527. .80185
/note="aggembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note-"assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
|db_xref="taxon:9606"
|chromosome="11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="RP11-79904"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99463. .103433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30286. .88989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89090. .99362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .09165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                       FEATURES
```

셤

g

ઠે

g

ઠે

```
19489: contig of 774 bp in length

19589: gap of 100 bp

102044: contig of 755 bp in length

121205: contig of 761 bp in length

1305: gap of 100 bp

1305: gap of 100 bp

13189: contig of 784 bp in length

13189: contig of 784 bp in length
                                                                                                              100 bp
of 743 bp in length
100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100 bp
1754 bp in length
100 bp
1748 bp in length
100 bp
1733 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14392: contig or ,,, -, 92: gap of 100 bp 15244: contig of 752 bp in length 144: gap of 100 bp 100 b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10218: gap of 100 bp 10978: contig of 760 bp in length 11078: gap of 100 bp 11850: contig of 772 bp in length 11950: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100 bp
739 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26347: contig of 740 bp in length 147: gap of 100 bp 27202: contig of 755 bp in length 102: gap of 100 bp 28052: contig of 750 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29741: contig of 732 bp in length 341: gap of 100 bp 100 b
                                                                                                                                                                                                                            of 100 bp
contig of 743 bp in length
of 100 bp
contig of 738 bp in length
                                                                                                                                                                                                                                                                                                                                                             100 bp
f 751 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of 100 bp contig of 746 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100 bp
E 764 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             762 bp in length
100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100 bp
732 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    32373: contig of 776 bp in length
73: gap of 100 bp
33222: contig of 749 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   754 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9 8508: gap of 100
9 9254: contig of 7.
5 9354: gap of 100
5 10118: contig of 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           53: gap of 1
14392: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17027: gap of 1
17766: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15: gap of 1
19489: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              172: gap of
23826: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26: gap of 1
24674: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     contig ôf
                                                                                                                                                                                          contig of
                                                                                                                                                                                                                                                                                                                                                                                                               contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12712: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13553: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              contig of
                                                                                                                  contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               607: gap of
26347: cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25507: co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29841: gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gap of
3328: c
                                                                        8: gap (
                                                                                                                                                                                                                                                                                                                                                                 6803: gap c
                                                                                                                                                    9: gap (
                                                                                                                                                                                                                    5122: gap (5865: 0
                                                                                                                                                                                                                                                                                                5965: gap 6
                                                                                                                                                                                                                                                                                                                                                                                                                                         7654: gap
8408:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15344:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16195:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17866:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23072:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23926:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24774:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12812:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13653:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14492:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20444:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21305:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22189:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28152:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30724:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32473:
                                                                        3428:
       2555:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18715:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27302:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29009:
                                                                                                                                                    4279:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25607
                                                                                                                                                                                                                                                                                                                                                                                                                                             7555
7655
8409
8509
```

35991 AAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGAAT 36050 84 ATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAAAC 144 AAAAAACAACCIIIIIAAGAGIIGAIGGCIACICAIIIIAIAICIGCCICCICGGAAI 35932 ATATITAGITICACTCAGGITITICAAAGCTACGCIGICCCCC-AAAGACGAACAAAC 1; Gaps DB 2; Length 75002; 78 42677: Gap of 100 bp 111 length 1314: Contig of 737 bp in length 1314: Contig of 737 bp in length 1314: Contig of 737 bp in length 1314: Contig of 738 bp in length 1314: Contig of 758 bp in length 1312: Contig of 756 bp in length 1312: Contig of 756 bp in length 1312: Contig of 750 bp in length 1313: Contig of 750 bp in length 1314: Contig of 743 bp in length 1314: Contig of 743 bp in length 1314: Contig of 743 bp in length 1314: Contig of 755 bp in length 1314: Contig of 765 bp in lengt 37 36736; gap of 100 bp 17468: contig of 732 bp in length 1758; gap of 100 bp 1758; gap of 100 bp 1758; gap of 100 bp 1759; gap of 1759 bp in length 1759; gap of 100 bp 1759; gap of 1759 bp in length 1759; gap of 1759; gap o 100 bp 10 1; Indels 14: 9ap of 243 bp in length 27: 9ap of 100 bp 55292: contig of 765 bp in length 92: gap of 100 bp 100 bp 100 bp 100 bp 721 bp in length 85: gap of 100 bp 57829: contig of 744 bp in length 129: gap of 100 bp 57929: gap of 100 bp 58677: contig of 748 bp in length in length 40995: gap of 100 bp 41729: contig of 734 bp in length in 'n Score 128.4; DB 2 Pred. No. 2.3e-19; 0; Mismatches 1. 100 bp. 748 bp. 35891: gap of 100 bp 36636: contig of 745 bp 34072: contig of 72: gap of 134932: contig of 41829: gap of 1 42577: contig of 5791: contig of contig of contig of 50247: co--392: gap of 56164: cor 50347: gap of 51067: con 52015: gap of 53684: gap of 56264: gap of 35032: gap of 57.1%; 98.6%; 56985 Query Match 57.1 Best Local Similarity 98.6 Matches 140; Conservative 51167: 52845: 54527: 34172: 55392 g δ

35990

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS

ITLE JOURNAL REMARK REFERENCE AUTHORS TITLE JOURNAL

COMMENT

RESULT 6 AC117269/c LOCUS

g

ઠે

```
192454 bp
Rattus norvegicus clone CH230-4P5,
56 unordered pieces.
                                                                                                  AC094553.6 GI:21716350
HTG; HTGS_PHASE1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 192454)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                              Norway rat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Worley, K.C.
       LOCUS
DEFINITION
                                                                                                                                                                                  ORGANISM
                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (09-APR-2002) Genome Analysis, Institute of Molecular
Submitted (109-APR-2002) Genome Analysis, Institute of Molecular
Biotechnology, Beutenberstr. 11, John 07745, Germany
CES predictions from GeneID may contain errors. Further Information
is available from IMB Jena, Department of Genome Analysis
(http://genome.imb-jena.de/dictyosteljum/)
and the Univerity Colonge, Institute for Biochemistry I
(http://www.uni-koeln.de/dictyostelium/project.shtml
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21100 ТGTTTTAAACCACAATGTTATTTTTTTTTTTAATTTTTAATTTTTTAAAATTT 21041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21040 ATTTATATAGAAATTTTTTATAAAACTCTCGAAATCACCAAGTTAGAAATTAACAAA 20981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AC117269 30726 bp DNA linear HTG 09-APR-2002 Dictyostellum discoideum chromosome 2 map 679874-710598 strain AX4, *** SEQUENCING IN PROGRESS ***, in ordered pieces.
                                                                                                                                                                                                                                                                                                                         Dictyostelium discoideum.
Dictyostelium discoideum.
Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium.
1 (bases I to 30726)
Gloeckner,G., Eichinger,L., Szafranski,K., Pachebat,J., Dear,P.,
Lehmann,R., Baumgart,C., Parra,G., April,J.F., Guigo,R., Kumpf,K.
Tunggal,B., Cox,E., Quail,M.A., Platzer,M., Rosenthal,A. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      150 ACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGAATCAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30 TGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Agency : Deutsche Forschungsgemeinschaft (DFG).

• NOTE: This is a 'working draft' sequence.

• This sequence will be replaced

• by the finished sequence as soon as it is available and

• the accession number will be preserved.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21.0%; Score 47.2; DB 2; Length 30726; 52.6%; Pred. No. 0.35; tive 0; Mismatches 93; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence and Analysis of Chromosome 2 of Dictyostelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The Dictyostelium Genome Sequencing Consortium ( ) (bases 1 to 30726)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Dictyostelium discoideum"
/strain="AX4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /map="679874-710598"
2998 c 3058 g 12380 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:44689"
/chromosome="2"
                                                   36051 CAATTAGGAATTTTTTTTTT 36072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20920 ATAATTTTTTTTT 20905
                                                                                                                                                                                                                                                                             AC117269.1 GI:20087116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210 GGAATTTTTTTTT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 103; Conservative
                                                                                                                                                                                                                                                                                                         HTG; HTGS_PHASE2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baumgart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ASE COUNT
```

FEATURES

8

ઠે

음 ઠે 8 ò

```
Mushy, D.M., Adama, C., Adio-Oduola, B., Ali-osman, F.R., Allen, C., Albercoks, S. L., Amaretunge, H.C., Are, J.R., Ayele, M., Banks, T., Babtrooks, S. L., Amaretunge, H.C., Are, J.R., Ayele, M., Banks, T., Babtrooks, S. L., Amaretunge, H.C., Are, J.R., Ayele, M., Bonnin, D., Bubarooks, S. L., Srieker, M., Brown, B., Brown, M., Bryant, N.P., Bubay, C., Burch, P., Burch, S. R., Chacko, J. Chavez, D., Carron, T. E., Carron, T. E., Chavez, D., Chon, G., Chen, R., Chen, C., Coyle, M.D. Datharne, S.R., David, R., Delaney, K.R., Degar, D., Edwards, C.C., Elbri, C., Durbin, H.H., Delaney, K.R., Degar, D., Edwards, C.C., Elbri, C., Escotto, M., Earnhart, C., Edgar, D., Edwards, C.C., Elbri, C., Escotto, M., Earnhart, C., Edgar, D., Flagg, N., Ford, J., Foster, P., Frantz, P., Farland, A., Gao, J., Garcia, A., Garner, T., Garza, N., Gill, R., Gorrell, J.H., Guevara, M., Gunaranne, P., Hale, S., Hamilton, K., Harrindez, C., Harrisk, K., Harrand, M., Hodgson, A., Hodgson, A., Hodgson, R., Hollins, B., Homsi, F., Howard, S., Huber, J., Hallyk, S., Huwe, J., Jackson, L.E., Jacobson, B., Jia, Y., Johnson, R., Jolivet, S., Joudah, S., Kallys, S., Khan, U., King, L., Korvah, J., Kovar, C., Kraebil, A., Martinez, E., Massey, E., Machilla, A., Lucier, R., Mulle, J., Lai, L., Litchtarge, O., Lieu, C., Luin, M., Loal, B., Massey, E., Machilla, A., Martinde, A., Mattinder, A., Mattinder, A., Mattinder, A., Mattinder, A., Mattinder, A., Mattinder, M., Medl, D., Newtson, N., Nguyen, N., Noted, M., Peters, L., Soctt, G., Mang, C., Mang, S., Canle, F., Paneria, A., Taneria, A., Taneria, A., Saten, T., Tansey, J., Taylor, C., Taylor, T., Telffcod, B., Thomas, N., Tanesy, J., Taylor, C., Taylor, T., Telffcod, B., Thomas, N., Walliamson, A., Stocher,
DNA linear HTG 10-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (10-JUL-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On Jul 9, 2002 this sequence version replaced gi:18874113.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (15-SEP-2001) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
3 (bases 1 to 192454)
                                                                                                                                                                                                                                                                                                           Rattus norvegicus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center code: BCM
Web site: http://www.hgsc.bcm.tmc.edu/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Project Information
```

length bp in length

unknown

contig gap of

in length

```
47314
47414
50151
50251
52354
52454
52812
55812
55912
59198
                                                                                                                                                                                                                       70321
73867
73967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            162643
                                                                                                                                                              62338
62438
66381
                                                                                                                                                                                                                                                         76716
                                                                                                                                                                                                                                                                     76816
                                                                                                                                                                                                                                                                               80933
81033
84397
                                                                                                                                                                                                                                                                                                                             88644
88744
                                                                                                                                                                                                                                                                                                                                                               92838
95329
                                                                                                                                                                                                                                                                                                                                                                                                  101100
                                                                                                                                                                                                                                                                                                                                                                                                                                             111157
111257
115898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 115998
                                                                                                                                                                                                66481
70221
                                                                                                                                                                                                                                                                                                                  84497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        34017
                                                                                                                                                                                                                                                                                                                                                                                      95429
                                                                                                                                                                                                                                                                                                                                                                                                                      106031
                                                                                                                                                                                                                                                                                                                                                     92738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           43506
                                                                                                                                                                                                                                                                                                                                                                                                                                    106133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                               NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).
NOTE: This is a "working draft' sequence. It currently consists of 56 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                     Sequencing vector: plasmid;
Sequencing vector: plasmid;
Chemistry: Dye-terminator Big Dye: 100% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 13018 bases at least Q40
Consensus quality: 144061 bases at least Q20
Consensus quality: 149644 bases at least Q20
                                                                                                                                                                                                                                 contig of 1247 bp in length
gap of unknown length
contig of 1104 bp in length
contig of 1203 bp in length
gap of unknown length
gap of unknown length
contig of 1056 bp in length
contig of 1058 bp in length
contig of 1058 bp in length
gap of unknown length
gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   contig of 1036 bp in length
gap of unknown length
contig of 1216 bp in length
gap of unknown length
contig of 1048 bp in length
gap of unknown length
                                                                                                                                                                                                                                                                                                               gap of unknown length
contig of 1058 bp in length
gap of unknown length
contig of 1699 bp in length
                                                                                                                                                                                                                                                                                                                                                             length
op in length
                                                                                                                                                                                                                                                                                                                                                                                                             length
bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                contig of 1455 bp in length
gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            length
bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length
bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      length
bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        bp in length
length
                                                                                                                                                                                                                                                                                                                                                                                                  bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                               in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1340 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2505 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               in length
                                                                                                                                                                                                                                                                                                                                                                                      length
                                                                                                                                                                                                                                                                                                                                                                                                                                    length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ength
                                                                                                                                                                                                                                                                                                                                                                                                                                    contig of 1008 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2249 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1242 bp
                                                                                                                                                                                                                                                                                                                                                               unknown ]
of 1606 b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1369
                                                                                                                                                                                                                                                                                                                                                                                                  1520
                                                                                                                                                                                                                                                                                                                                                                                                                        1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unknown
                                                                                                                                                                                                                                                                                                                                                                                      unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unknown
                                                                                                                                                                                                                                                                                                                                                                                                             unknown
Center project name: GAWO
Center clone name: CH230-4P5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gap of unk
contig of
gap of unk
contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              contig of
gap of unk
contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        contigof
gap of unk
                                                                                                                                                                                                                                                                                                                                                                                                                        contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     contig c
                                                                                                                                                                                                                                                                                                                                                                           contig c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          contig (
                                                                                                                                                                                                                                                                                                                                                                                                  contig
gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               contig
gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        contig
                                                                                                                                                                                                                                                                                                                                                               gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                   gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24557:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17042:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43033:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1457
                                                                                                                                                                                                                                               1248
1348
2452
2552
3755
3855
                                                                                                                                                                                                                                                                                                                                                                                                             111194
112335
12335
12435
13443
14579
14679
15895
17043
18367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26027
27482
27482
28601
28601
331306
333786
333886
333886
33886
33886
33886
40886
40888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21681
21781
23023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24458
24558
25927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8467
```

113461 AAAATTGCCTTCAATTTCTTTGTATAACAAAGATTGAGGCTTTTATTTTTCCCATAGAGAA 113520 ö 143 84 ATAITITAGITICACTCAGGITITICAAAAGCTACGCTGTCCCCCAAAAAAACGAAAAAC 24 AAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGA Gaps AAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCT 194 Score 46.2; DB 2; Length 192454; Pred. No. 0.42; 0; Mismatches 78; Indels 0; length 'n length P = length in length in length in length known length 7766 bp in length length bp in length bp in length op in length bp in length bp in length in length bp in length ength ength Length ength Length ength. length ength ength length length ength ength unknown length ength ength ength unknown length of 11271 bp of 10440 bp 3286 unknown 6864 of 5996 of 3943 of 3546 unknown unknown 4117 unknown 4147 2491 5671 unknown unknown 4641 4959 unknown unknown of 3358 unknown 3040 3740 2749 3364 3994 unknown unknown unknown 2103 unknown unknown contig of gap of unka contig of gap of unka contig of 당 ŏţ oţ ij contig of gap of u contig of on the contig of gap of u contig of day of u contig of applying of the contig of the cont contig gap of u contig gap of contig contig contig gap of u gap of contig gap of contig gap of contig contig gap of Query Match
Best Local Similarity 54.4%;
Matches 93; Conservative 45139: 45239: 47313: 47413: 50150: 59197: 88643: 52453: 55811: 59297: 62437: 66380: 66480: 70220: 73866: 73966: 76715: 76815: 81032: 84396: 88743: 92837: 95328: 95428: .01199: .34116: 34016:

```
/product="methlytransferase"
/protein id="AAB9379.1"
/db_xref="id="2010.1592016"
/translation="MIMYAIGIGDNKEBVLKAYEKLKEEGIEVELIDNPKLLVDKLL
DGEIDGAVRGSLSSRVILYIRERIGKFYRASILKNPFTNGTFLLSSVGIDDISEDKN
ERK KDKIRITEFASNPLKNYNNIKAKVAVLSGGRLGDLGRNKVVDETIYEAEEIVEHFK
GNVDIIHNGTLIEEVLKDGYNIIAAUGITGRNIIAAUGITGRLGELICKIPGTARVAVLESDKNV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /trainilation="MGILGKIKNKLKSIGKRVIIDFYRFLDNSGVLKIYEKILEEAID
KDNLPKHVAIIMDGNRRAAEIYGKDRYYGHYLGAEKVREVLRWARDLGINVVTLYAFS
THENRPRRAEDVLKLMELFEKKFYEIADDEEJHRYEVRYRGTGAÏNLLFORVOVKAIKYA
EERTKWYKKFVNIAJAGGOGDEIDAWKKIAEKVKRGEIREEDIDKELIDKGLYTAN
LPFPNPDLIIRTSGEERISNFLIWGSSYSELYFCDIYWPLFRRVDFLRAVRDYORRQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /product="M. jannaschii predicted coding region MJ1373"
/protein id="AAB99388.1"
/db xref="G1:1592018"
/translation="MKKKIIILF-FTAILCSITLCGCISFEKTQIGNYNIKNNSCINS
NVSKWQTIQNVSDK.YNNNTWILLNTLNYEILAYGAFGEKNRGYYYYYKDKTIIVINL
EEMPTAGYKIKIINITETANKIIVYYKVIPPKEFAAMVVTYPYIKLSVNGTYNVECKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /translation="MRVEIIFLGCGGGRWATITQKKATGGFRIHTNELRMHVDPGPGA
IVRLNELKISPWRTTALFISHCHPDHYTDGEIIVEA-TQGMTKKRGVFLGSLSVVEGF
GESTVVVSKHQSKLEEVRVLYFGDSAELYDTTIKATHTKHGDPFGIGFRLSTIYGDI
GYTSDTFFIPQLIEDFDGVRILLANIVRKKNERIKGHLCSNDAIDLINSMNKKPELLI
MNHMGVKMTNPQIEARYISQNTGIEVIPARLGLKVELLNGKYKYQLIK"
complement (4473. .5720)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3680. .4480
/gene="MJ1374"
3680. .4480
/gene="MJ1374"
/note="similar to GB:AE000666 percent identity: 42.73;
identified by sequence similarity; putative"
                                                                                                                                                       /note="similar to GP:2437836 percent identity: 39.09; identified by sequence similarity; putative" /codon start=1 /rensi_teable=11
                     RNPIDI PKRIKEFVEAKI FVLYGESGAIGGALIAEDILKGKRDILGIEVEFK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note="hypothetical protein; identified by GeneMark;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="similar to GB:D26185 SP:P37555 PID:467446
GB:AL009126 percent identity: 23.61; identified by
sequence similarity; putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note="similar to GB:L42023 SP:P44938 PID:1006041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PID:1221025 PID:1205167 percent identity: 47.86; identified by sequence similarity; putative" ./codon start=1 /transI_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /transl_table=11
/product="conserved hypothetical protein"
/protein_id="AAB99380.1"
/db_xrefe="GI:1592017"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    producE="conserved hypothetical protein"
protein id="AAB99381.1"
db_xref="GI:1592019"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complement (4473. .5720)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
/transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /codon_start=1
/transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="MJ1372"
2285. .3127
/gene="MJ1372"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3124. .3612
/gene="MJ1373"
3124. .3612
/gene="MJ1373"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="MJ1375"
                                                                        'gene="MJ1371"
                                                                                                                              gene="MJ1371"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="MJ1375"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            putative
                                                   gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene
                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sutton, G.G., Blake, J.A., FitzGerald, L.M., Clayton, R.D.,
Sutton, G.G., Blake, J.A., FitzGerald, L.M., Clayton, R.A.,
Gocayne, J.D., Kerlavage, A.R., Dougherty, B.A., Tomb, J.-F.,
Adams, M.D., Reich, C.I., Overbeek, R., Kirkness, E.F., Weinstock, K.G.,
Merrick, J.M., Glodek, A., Scott, J.D., Geoghagen, N.S., Weidman, J.F.,
Puhrmann, J.L., Nguyen, D.T., Utterback, T., Kelley, J.M.,
Peterson, J.D., Sadow, P.W., Hanna, M.C., Cotton, M.D., Hurst, M.A.,
Roberts, K.M., Kaine, B.B., Borodovsky, M., Klenk, H.P., Fraser, C.M.,
Smith, H.O., Woese, C.R. and Venter, J.C.
Direct Submission
No Submitted (27-Aug-1996) The Institute for Genomic Research, 9712
Medical Center Dr., Rockville, MD 20850, USA
On Jan 30, 1998 this sequence version replaced gi:1592013.
                                                                                                                                                                                                                                                                                           E 1 (bases 1 to 9911)
Sutron,G.G., White,O., Olsen,G.J., Zhou,L., Fleischmann,R.D.,
Bult,C.J., White,O., Olsen,G.J., Zhou,L., Fleischmann,R.D.,
Gocayne,J.D., Kerlavage,A.R., Dougherty,B.A., Tomb,J., Adams,M.D.,
Reich,C.I., Overbeek,R., Kirkness,E.F., Weinstock,K.G.,
Merrick,J.M., Glodek,A., Scott,J.D., Geoghagen,N.S., Weidman,J.F.,
Fuhrmann,J.L., Nguyen,D.T., Utterback,T., Kelley,J.M.,
Roberts,K.M., Kaine,B.B., Borodovsky,M., Klenk,H.P., Fraser,C.M.,
Smith,H.O., Woese,C.R. and Venter,J.C.
Complete genome sequence of the methanogenic archaeon,
Methanococcus jannaschii
L. Science 273 (5278), 1058-1073 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /transI_table=11
/product="M. jannaschii predicted coding region MJ1369"
/protein_id="AAB99386.1"
/db_xref="GI:L592014"
/translation="MRDIVMTYWLFSSNNIRNIEICYNHMIWGFWDRNAGEKQKKNWR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /crānelation="MITVGIDHGTSGITTCIKDNDKKIIFKLKRTELKEKSYLEELEK
HISLEDIDLIALTYSWGDGIRKILPTEKVKRRGVLSIEGAGEKVGGGTKVYDEIKESG
HENVUIPGLHRGIECLDERFRALVSHIASPEKVSIAYYKLFGFNDFVLSDISSNTV
TLLIKOGKIFGGFPAGTGALHGFIDLEMIRDIDAGKITJAREAFSKAGAVKLAKLY
KGVENTKEEIINNYFNDENCRLAVDSLILSVSMEINSLLPLLDKNKRRVVLAGSIGTL
                                             BCT 28-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SFIRKYNQIKPFDVAVFQIAKTGEIHAIGVIKETYYDDQTPIWDNEINLNKYTFPWRV
SFSVIIFSKEAVIKRPIKIQDYIDGYGLGELEHHDFNEILKAFQKKFGMISIK"
9971 bp DNA linear BCT 28-JAN-1996
Wethanococcus jannaschii section 119 of 150 of the complete genome.
U67577 L77117
U67577.1 GI:2826400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /codon_start=1
/transl_table=11
/product="M. jannaschii predicted coding region MJ1370"
/protein_id="AAB99387.1"
/db_xref="GI:1592015"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /gene="MJ1369"
/note="hypothetical protein; identified by GeneMark;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="hypothetical protein; identified by GeneMark;
                                                                                                                                                                                  Methanocaldococcus jannaschii.
Methanocaldococcus jannaschii.
Archaea; Euryarchaeota; Methanococci; Methanococcales;
Methanocaldococcaceae; Methanocaldococcus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Methanocaldococcus jannaschii"
/db_xref="taxon:2190"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87. ... 554
/gene="MJ1369"
87.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="MJ1370"
584. .1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1/transl_table=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="MJ1370"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 9971)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . . 997.
                                       LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bource
                                                                                                                                                       KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene
                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
• FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOS
            J67577/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COS
```

```
States I to 146333

States I to 146334

States I to 146344

States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Birren, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Boguslavkiy, L., Boukhgalter, B., Anderson, S., Barna, N., Bastien, V., Roguslavkiy, L., Boukhgalter, B., Brown, A., Camarata, J., Campopiano, A., Chang, J., Chacaro, B., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cook, A., Cooke, P., DeArellano, K., Daz, J.G., Dodge, S., Faro, S., Garden, S., Gardyna, S., Gardyna, S., Gardyna, S., Gordes, S., Gorde, S., Gorder, M., Graham, L., Grand-Pierre, N., Hagos, B., Haaford, A., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Kells, C., LaRocque, K., Lunderst, T., Lehoczky, J., Levine, K., Liu, G., McCarthy, M., McEwan, P., McKernan, K., McPheeters, R., Meldrim, J., McDau, C., Norman, C.H., O'Connor, T., Naylor, J., Samues, C., Schupback, R., Schauer, S., Schupback, R., Stange-Thomann, N., Stojanovic, N., Strauss, N., Subramanian, A., Talamas, J., Tasiaye, S., Theodore, J., Tophan, K., Travis, N., Trigilio, J., Vossiliev, H., Viel, R., Wilse, C., Samer, A., and Zody, M., Direct Submission
                                                                                                                                                                                                                                          AC104893 146353 bp DNA linear HTG 05-APR-2002
Mus musculus clone RP23-288015, WORKING DRAFT SEQUENCE, 11 ordered
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (22-DEC-2001) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA 3 (bases 1 to 146353)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 146353)
Birren, B., Linton, L., Nusbaum, C. and Lander, E.
Mus musculus, clone RP23-288015
                                                                                                                                                                                                                                                                                                                                                                                                      AC104893.3 GI:20043160
HTG; HTGS PHASE2; HTGS_DRAFT; HTGS_FULLTOP
Mus musculus.
2301 TTACCCAAAATCCCCACCTATTAGGAATTT 2272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 146353)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
                                                                                                                                                                                                                                                                                                                                                                      AC104893
                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                         AC104893/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                    RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KPGKIVLDLGCAPGGWMQVAREIVGDKGFVIGIDLQPVKPFEYDNVVAIKGDFTLEEN
LIKKIRELIPNDEKKVDVVISDASPNISGYMDIDHARSIDLYTTALQIATEMLKERGNF
VAKVPYGDMIDDYVNLVKKYFEKVYITKPQASRKESAEVYVIAKRYTGKKWEEEDKIK
RVKKVENEDNELLAKKIKEIRKLKSKK"

COMPLEMENT (6556..8217)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VIQSDRIELYYEYGKLI IEMGHAYVCDCNPEBFRELRNKGVPCKCRDRAIEDNLELWE
KMLMGELERVAVRLKTDIKHKNPSIRDFPI FRVEKTPHPRTGDKYCYYPLMRFSVPVD
DHLLCMTHVLRGKDHI VNTRCQAYIYKYFGWEMPEFİHYGILKIEDIYLLSTSSMYKGI
KEGLYSGWDDVRLGYLRALRRGIKPEAIYER MKRIGIKYÖADVKFSWENLYAINKELI
DKOARRFFFVWNPKKLI IEGAEKKVLKLRMHPDRPEFGERELIFDGEVYVGDELEEN
                                                                                                                                                                                                                                                                                                                    LTLYLGIFGSILISISLAYLVGGIFGLYLIYKÄLKGKFPFKKLIDIKNTTKNIFSNFNL
DILRYSIPIALTSSSYRLFGDIDNIVIMSIMGGFWSGIYGYSSLISRGIFMFRASAVSI
PLLPRISKTKDLSLLKEGIIQNTIFSSIFVIGCLFFPEIPLIAFFKTANPEGILCLRI
LAISSLFMSYYTLISSALQGLGYAKISFYIILFGLVLNIILNLILVNAYGIVGGSLAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product="glutamyl-tRNA synthetase (gltx)"
/protein_id="AAB99384.1"
/db_xref="Gl:1592022"
/translation="MEEVALARNAIKYNGKANPKAVLGIFLSENPEYRSKAKEVM
PIVBKVVBEVNKLLSLDBIKKKLEBLGEDVKKKEKKEKGLBLPNVKDKVVMRFAPNPSG
PLHIGHARAAVLNDYFVKKYGGKLILRLEDTDPKRVLPBAYDMIKEDDMLGVKVDEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KMYRLMELFNI VVEKVDDI ALAKYHSDDFKI ARKNKAKI IHWI PVKDSVKVKVLMPDG
EI KEGFAEKDFAKVEVDDI IQFERFGFVRI DKKDNDGFVCCYAHR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2361 AAAAATCTATAAAAATCAATTATTACTCTTTTTCCAATACTCTTTAATTTGTTTTTTATC 2302
                                                                                                                                                                                                                                          PIADTLTIFFSSGIPPAIAKFIAEEKEVDINKYIPILYIMILLSVVGFILTPYIKYLL
GGHYLNLPNILYFAVGLCVVASTVIAFSRGILQGLLKMKYLSLTWIVEYTAKVILVFI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product="cell division protein FtsJ"
/protein id="AAB9383.1"
/db_xref="Gl:1892021"
/translation="MGRKDKRWVLQRKRDFYYKLAKKLKYRSRASFKLMQLNEKFWVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2481 TAAATCTCTGCAGCCCTTCTATTTCCATCCATTATTATAGCTACATGTTTTGGTAAATTG 2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2421 TCTTTATCAATAGCCTCTTCTAAATCTTCTCGTAAATTTTTAAAACTCCGGAGTTGTCT 2362
                                                                                                                                                                                                             /translation="MSLCKDSIYILMSNLYSKGMAYLFYFITAFLLGTEAFGILKGLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="similar to PID:1051202 SP:Q50543 percent identity:
51.36; identified by sequence similarity; putative"
/codon start=1
/transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCC 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127 AAAAAACGAAACAAAAACAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="similar to GB:L42023 SP:P45162 PID:1007333 PID:1221464 PID:1205570 percent identity: 40.10; identified by sequence similarity; putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 9971;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.2;
0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187 IGCCICCTCTGCTGAATCAATTAGGAATTT 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 45.2;
                                         /transl_table=11
/product="SpoVB isolog"
/protein_id="AAB99382.1"
/db_xref="G1:2826401"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LITSISVFLIGVFAILRIKKHII"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               complement (6556. .8217)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene="MJ1376"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /codon_start=1
/transl_table=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="MJ1378"
8402. .9850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8402. .9850
/gene="MJ1378"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene="MJ1376"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="MJ1377"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene="MJ1377"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 20.1%;
Best Local Similarity 51.0%;
Matches 107; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8402. .9850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
```

g

õ

8 &

.9,

셤

ઠે

```
E 2 (bases 1 to 200110)

S McPherson, J.D. and Waterston, R.H.

Direct Submission

L Submitted (08-APR-2002) Genome Sequencing Center, 4444 Forest Park

B 3 (bases 1 to 200110)

S McPherson, J.D. and Waterston, R.H.

Direct Submission

L Submitted (25-MAY-2002) Genome Sequencing Center, 4444 Forest Park

Parkway, St. Louis, MO 63108, USA

Parkway, St. Louis, MO 63108, USA

R Chases 1 to 200110

S McPherson, J.D. and Waterston, R.H.

Direct Submission

Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89100 TAAAAAATGAAATAAAAAAAAATCATACACATTTTTCCAAATAAAGCACATCTTTATAAA 89041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89040 AAAATTTAGGAACAGTCAGGGTTATACAGAGAAACCCTGTCTCAAAAAACAAAAACAAC 88981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38980 AACAACAAAATCAATTTAATTTATGCAGAATAGCTCCTATTTCTTTATCCTATCATGCT 88921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ROD 16-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (16-JUL-2002) Genome Sequencing Center, 4444 Forest Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 20110)
MCPherson, J. D. and Materston, R. H.
The sequence of Mus musculus clone
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23 TAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83 AATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 143 CAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parkway, St. Louis, MO 61108, USA
On May 25, 2002 this sequence version replaced gi:20069804
                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Center: Washington University Genome Sequencing Center
Center code: WUGSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Center project name: M_BA0431G18
                                                                                                                                                                                                                                                                                                                                                  Query Match
19.6%; Score 44; DB 2; Length 146353;
Best Local Similarity 51.5%; Pred. No. 1.4;
Matches 101; Conservative 0; Mismatches 95; Indels 0
                                                                                                                                                                                                                                                             1002 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus clone RP23-431G18, complete sequence. AC117237 AC117237.2 GI:21206431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Web site:http://genome.wustl.edu/gsc/index.shtml
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: submissions@watson.wustl.edu
                                                                                                                                                     /note="assembly_fragment"
tture 113115. 146353
/note="assembly_fragment"
46768 a 27185 c 26808 g 44590 t
                                                                                           /note="assembly_fragment"
83212. .113014
                                       /note="assembly_fragment"
56198. .83111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88920 AAATAAATTÄTTTT 88905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                203 TCAATTAGGAATTTT 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            house mouse.
             misc_feature
                                                                       misc_feature
                                                                                                                                                                                               misc_feature
                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
AC117237/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                              ------ Genome Center
Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 **NOTE: This is a 'working draft' sequence. It currently consists of 11 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

1 872: contig of 872 bp in length 973 contig of 3055 bp in length 973 contig of 3055 bp in length 7968 8065: gap of 100 bp 100 bp 15055 sching of 3089 bp in length 1565: contig of 6989 bp in length 15155 22231: contig of 7077 bp in length 15155 22231: contig of 7077 bp in length 15155 22331: gap of 100 bp 15155 22331: contig of 10835 bp in length 15151 22331: gap of 100 bp 15155 22331: contig of 10835 bp in length 15157 22331: gap of 100 bp 15157 22331: gap of 100 bp 15155 2332 2331: gap of 1000 bp 15155 2332 2331: gap of 1000 bp 15155 2332 2331: gap of 1000 bp 
                                                                                                                                                                                                                                                                                                           Center clone name: 288 0.15
Sequencing vector: Plasmid; via: 100% of reads Sequencing vector: Plasmid; via: 100% of reads Chemietry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.960731
Consensus quality: 142944 bases at least Q30 Consensus quality: 144423 bases at least Q30 Consensus quality: 144423 bases at least Q30 Insert size: 152000; agarose-fp Insert size: 145335; aum-of-contigs Quality coverage: 6.1 in Q20 bases; sum-of-contigs Quality coverage: 6.4 in Q20 bases; sum-of-contigs
All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                      56096 56197; gap off 100 bp 56198 83111: contig of 26914 bp in length 83112 131014: contig of 29803 bp in length 113015 113114; gap of 100 bp 113015 113114; gap of 100 bp 113115 146353: contig of 33239 bp in length Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44383: contig of 11117 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183: gap of 100 bp 56097: contig of 11614 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="RPCI-23 Female Mouse BAC"
                                                                                                                                                            Center code: WIBR
Web site: http://www-seg.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             128. .7965
'note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           )066. .15054
/note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      973. .4027
/note="aBBembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/db_xref="taxon:10090"
/clone="RP23-288015"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="assembly_fragment'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44384 44483: gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33167 33266:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
```

ö

Gaps

.; 0

89; Indels

0; Mismatches

```
96; Conservative
                                                                                                                                                                                                                                                                                                 210 GGAAT 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83197 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC006281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
AC006281/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                   원
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                      NOTE: It currently consists of 1 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submitter. This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

* NOTE: This is a 'working draft' sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AP005406 128526 bp DNA linear HTG 13-JUN-2002 Oryza sativa (japonica cultivar-group) chromosome 8 clone B1147B12, *** SEQUENCING IN PROGRESS ***, in ordered pieces.
                                                                                                                                                                                                                                      75 TTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACG 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oryza sativa (japonica cultivar-group)
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                        135 AAACAAAACAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCT 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sasaki, T., Matsumoto, T. and Katayose, Y.
Direct Submission
Submitted (12-JUN-2002) Takuji Sasaki, National Institute of
Agrobiological Sciences, Rice Genome Research Program; Kannondai
2-1-2, Tsukuba, Ibaraki 305-8602, Japan
(E-mail:tsasaki@nias.affrc.go.jp, URL:http://rgp.dna.affrc.go.jp/,
Tel:81-298-38-7441, Fax:81-298-38-7468)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AP005406.1 GT:21396516
HTG; HTGS PHASE2.
Oryza setiva (japonica cultivar-group) (cultivar:Nipponbare) DNA,
clone:B1147B12.
                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sasaki,T., Matsumoto,T. and Katayose,Y.
Oryza sativa nipponbare(GA3) genomic DNA, chromosome 8, BAC
clone:B1147B12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Oryza sativa (japonica cultivar-group)
                                                                                                                                             ch 19.5%; Score 43.8; DB 10; Length 200110; 1 Similarity 55.6%; Pred. No. 1.4; 84; Conservative 0; Mismatches 67; Indels 0; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 42.6; DB 2; Length 128526; Pred. No. 2.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     by the finished sequence as soon as it is available the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 113 others
                                                                                                                                                                                                                                                                                                                                                                                                                                        105450 TTTATTTTACATTAGGTGTTATGTGTGTTT 105420
                                                                                                                                                                                                                                                                                                                                                                                                         195 CTGCTGAATCAATTAGGAATTTTTTTTTT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25748 c 26754 g 37999 t
                                                                                    62980 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Published Only in Database (2002)
2 (bases 1 to 128526)
                        organism="Mus musculus"
                                     /db_xref="taxon:10090"
/clone="RP23-431G18"
37978 c 38823 g 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   db xref="taxon:39947"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="B1147B12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18.9%;
51.9%;
  .200110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                        Best Local Similarity
                                                                                      æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37912 a
                                                                                    60329
                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
ORIGIN
    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
AP005406/c
                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                     ò
```

```
35533 GCATACATGAAAAATGTCAATGATAAGTTAATAAAGATGGTACAACGCATAATCCAACCA 35474
                                                          35653 TGAAATAGCTGGTGATAATCCAGGGAAATCGTCATCATTTTCAAAGACATTGGATGATAG 35594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HTG 12-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 199551)
Hyman,R.W., Fung,E.L., Qin,F., Tamaki,T., Kurdi,O.B. and Davis,R.W.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82 GAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAA 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plasmodium falciparum chromosome 12 clone 3D7, *** SEQUENCING IN
30 TGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22 ATAMAATTIGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAA
                                                                                                                                                                                                                                              150 ACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGAATCAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (05-JAN-1999) Stanford DNA Sequencing and Technology Center, Stanford University, 855 California Avenue, Palo Alto, 94304, USA
                                                                                                                          90 AGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             plasmodium falciparum.
Plasmodium falciparum
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rowley, D., Mao, J., Tamaki, T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       And Aug 12, 2000 this sequence version replaced gi:8810457.

* NOTE: This is a 'working draft' sequence. It currently

* consists of 2 contigs. The true order of the pieces

* is not known and their order in this sequence record is

* arbitrary. Gaps between the contigs are represented as

* runs of N, but the exact sizes of the gaps are unknown.

* This record will be updated with the finished sequence

* as soon as it is available and the accession number will

* be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 199551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 41526: contig of 41526 bp in length
41527 41726: gap of unknown length
41727 199551: contig of 157825 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Plasmodium falciparum"
/db_xref="taxon:5833"
/chromosome="12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 18.8%; Score 42.4; DB 2; Best Local Similarity 50.5%; Pred. No. 2.9; Matches 103; Conservative 0; Mismatches 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kurdi, O.B., Conway, A.B. and Davis, R.W. Plasmodium falciparum 3D7 chromosome 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17543 c 19759 g 78852 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROGRESS ***, 2 unordered pieces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199551 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hyman, R.W., Fung, E.L., Qin, F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="PFYACB8-95"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 199551)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AC006281.8 GI:9797738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="3D7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .19955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HTG; HTGS PHASE1
                                                                                                                                                                                                                                                                                                                                                                                                                                       35473 CAATT 35469
```

셤 ò

ò

```
DOURDATION, DECEMBER 19, CARRELAGE 19, CARRELAGE 19, CHARGARD 19, CHARGARD 19, CHARGARD 19, CHARGARD 19, CHARGARD 19, CHARGARD 19, COOK, A., CARRELAGE, M., CALLENBON, M., GAGG, D., GALGAGA, C., CALLENBON, C., CARRAN, M., CACH, A., CALLENG, M., CALLEN, C., LAROCQUE, K., LAMBER, R., CALLENG, C., LAROCQUE, K., LAMBER, R., CALLENG, C., LAROCQUE, C., MACCHER, C., PRETER, N., POLINCE, C., O'DONNETI, P., O'DONNETI, P., O'DONNETI, P., O'DONNETI, P., D'DONNETI, C., O'DONNETI, C., CARDER, C., SCHUPBACK, M., RILBEY, R., RIBE, C., SCHUPBACK, R., SCHUPBACK, M., SALDGE, R., SCHUPBACK, M., SALDGE, R., SCHUPBACK, M., SALDGE, R., SCHUPBACK, M., SALDGE, C., TOPHAM, K., TRAWISON, B., WWAN, C., WAYMAN, D., YEWUNG, C., Zainnoun, J., Zembek, L., Zimmer, A. and Zody, M. Direct Submission

Submitted (11-JUN-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

On Jun 11, 2002 this sequence version replaced gi:14994158

All repeats were identified using RepeatMasker:
SMIL, A.F.A. & Green, P. (1996-1997)

http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Only the last 147.8 kb of this clone are being submitted.
The remainder overlaps accession number AC105129 (WICGR project
L22971].
       Campopiano, A., Chang, J., ollins, S., Collymore, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: sequence submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone lib="RPCI-11 Human Male BAC"
572. .672
/rpt_family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Web site: http://www-seg.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="15"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rpt_family="MIR3" 943. 3001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /rpt_family="MIR3"
complement (3473. .3526)
/rpt_family="L2"
3584. .3758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Center project name: L2618
Center clone name: 346_A_8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /rpt_family="AluJo"
1357_.1665
/rpt_family="AluSg"
1666_.1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /rpt_family="AluJo"
2049. .2069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            clone="RP11-346A8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'rpt_family="(TC)n"
1072. .2096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /rpt_family="(CA)n"
2154. .2185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="(TG)n"
complement(2458...2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      666. .1699 .
rpt_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center code: WIBR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    map="15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Birren, B., Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baldwin, J., Barna, N., Beckerly, R., Boguslavkiy, L., Boukhgalter, B., Brown, A., Castlle, A., Collangelo, M., Collins, S., Collymore, A., Cooke, P., Dakrellano, K., Dewar, K., Domino, M., Donnelan, L., Doyle, M., Ferreira, P., Fitzhugh, M., Forrest, C., Funke, R., Gage, D., Galagan, J., Gardyna, S., Grant, G., Hagos, B., Heaford, A., Horton, L., Howland, J. G., Johnson, R., Macdonald, P., Marquis, N., McKernan, R., Mcdonald, P., Marquis, N., McKernan, K., Mcdonald, P., Marquis, N., Morrow, J., Naylor, J., Norman, C.H., O'Connor, T., O'Donnell, P., Peterson, K., Pollara, V., Riley, R., Roy, A., Santos, R., Severy, P., Stange-Thomann, N., Stojanovic, N., Subramanian, A., Talamas, J., Wyman, D., Ye, W.J., Zlumer, A. and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Signates I. Control, Numbers, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Anderson, S., Barna, N., Camagelo, M., Campopiano, A., Chang, J., Chopel, Y., Campopiano, A., Chang, J., Chaster, B., Chopel, Y., Colangelo, M., Collins, S., Collymore, A., Cook, A., Cooke, P., FitzGerald, M., FitzHugh, W., Gage, D., Faro, S., Faro, S., Gord, S., Goyette, M., Gade, D., Galagan, J., Gardyna, S., Ginde, S., Goyette, M., Graham, L., Grand-Pierre, N., Hagos, B., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Kells, C., LaRocque, K., Luu, G., MacLean, C., MacChen, T., Lehoczky, J., Marquis, N., Matthews, C., McCarthy, M., McEwan, P., McKernan, K., Meldrim, J., Mencus, L., Mihova, T., Mlenga, V., Murphy, T., Vallo, C., Nucol, R., Norbu, C., Norman, C.H., O'Connor, T., O'Donnell, P., O'Nell, D., Oliver, J., Peterson, K., Phunkhang, P., Pierre, N., Pollara, V., Raymond, C., Reterson, K., Phunkhang, P., Pierre, N., Schuer, S., Stojanovic, N., Strauss, N., Subramanian, A., Talams, J., Tesfaye, S., Thedore, J., Topham, K., Travers, M., Travis, N., Trigillo, J., Vonn, V., Vonn, Y., Vonn, C., Stamper, A., and Zody, M., And C., Sto, W., Straus, M., Travis, N., Trigillo, J., Vonn, V., Vonn, G., Willon, B., Wu, X., Wyman, D., Ye, W., Y., Willon, S., Lamer, A., and Zody, M., And Zody, M., And C., Sto, M., Willon, B., Wu, X., Wyman, D., Ye, W., Ye, W., Ye, Young, G., Zainnou, J., Zembek, L., Zimmer, A. and Zody, M., Strause, S., Severy, P., Zimmer, A. and Zody, M., And C., Sto, W., Willon, B., Wu, X., Wyman, D., Ye, W., Ye, W., Ye, Ye, W., Ye, Ye, W., Ye, Ye, W., Ye, Ye, W., X., Wann, D., Ye, W., X., Wann, D., Ye, W., X., Wann, D., Ye, W., X., Wann, M., X., Wann, M., X., Wann, M., X., Wann, W., X., 
                                                                                                                22827
                                                                                                                                                                                                                                                                                                                                                                                                                                ACO11846 14-7760 bp DNA linear PRI 11-JUN-2002
Homo sapiens chromosome 15, clone RP11-346A8, complete seguence.
ACO11846
                                                                    142 ACAAAAAAAAAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGA 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryoča, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

    (bases 1 to 147760)

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (15-OCT-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (10-JUN-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Birren, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Birren, B., Linton, L., Nusbaum, C. and Lander, E. Homo sapiens chromosome 15, clone RP11-346A8
                                                                                                                                                                                                                                                                            22766 Trcrrrrrrrrrrrrrrrrrrrrrrr
                                                                                                                                                                                                       202 ATCAATTAGGAATTITITITI 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AC011846.16 GI:21389294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       to 147760)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 147760)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    numan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
AC011846
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EPERENCE
```

```
138920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        138980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               138919 ICCATATITCTICTTTTTTAATTTTGTTGGTTCATAAGCTGTAGATCATATTCTGTTC 138860
ACO67745 156140 bp DNA 'linear PRI 10-MAY-2002
Homo sapiens chromosome 10 clone RP11-417C21, complete sequence.
ACO67745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
Submitted (10-MAY-2002) Genome Therapeutics Corporation, 100 Beaver
Street, Waltham, MA 02453, USA
On May 10, 2002 this sequence version replaced gi:13811871.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Therapeutics Corporation, 100 Beaver
                                              136
                                                                                                                                                                                                                                                                                                              Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases I to 156140)
Smith, D.R.
                                                                                                                                                                                                                                                                                                                                                                                        Genome Therapeutics Corporation Sequencing Center: Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        139039 CGTTTAATTCGTTTATACTTAATATACTCACTGATACAATATGTGAGTTTTTTCTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81 AGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  138979 TTTATTTTGGGTTTCTTTTGCTCCTCTTTCCCCCTTTCCTGTCTTATAAAGGAATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141 AACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 CATAAAATTTGAAATTAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGA
                                              77 CAGAAGAATATITIAGITICACICAGGITITITCAAAGCIACGCIGICCCCCAAAAAAAACGAA
                                                                                                                                      108045 AAAAAAAAGGCAAAGTCATTTTCCTTGGGTCTCTTCTATTAATTTTCTC 108094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 50.2%; Pred. No. 4.2;
Matches 103; Conservative 0; Mismatches 102; Indels 0;
                                                                                                           137 ACAAAACAAAAAAAACAACCITITITAAGAGTTGATGGCTACTCATTTGATC 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="RP11-417C21"
/clone_lib="RPCI-11"
44203 a 38631 c 34570 g 38736 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            138859 TCCTAGTGATTACTCTTTTTTTTT 138835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genome
53, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201 AATCAATTAGGAATTTTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (27-APR-2000) Ges
Street, Waltham, MA 02453,
3 (bases 1 to 156140)
                                                                                                                                                                                                                                                                AC067745.7 GI:20522196
                                                                                                                                                                                                                                                                                                                                                                                                                                2 (bases 1 to 156140)
Smith, D.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence Data
                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
                                                                                                                                                                                      RESULT 14
AC067745/c
LOCUS
                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                            ద
                                                                                                                                    g
                                                ò
                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18.7%; Score 42; DB 952.9%; Pred. No. 3.8; iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rpt_family="AluSx"
4836. 14999
                                                                                                                                    /rpt_family="Alux"
complement(6726. .7022)
/rpt_family="Alux"
/rpt_family="Aluxx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rpt family="MIR3"
3023. .13086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          family="AluSx" ...14513)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rpt_family="L2"
omplement(15356. .15637)
              family="Alusx"
ement(407
                                           family="AluSx"
                                                                                                                                                                                                                                                             rpt_family="L3" . 7530)
050. .R1e^
                                                                                                                                                                                                                                                                                                                                                                                     rpt_family="Alusx"
                                                                              complement (4737. .4774)
                                                                                                                                                                                                                                                                                                           rpt_family="MIR3"
omplement(8169..8480)
rpt_family="AluJo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt family="GC_rich"
12008. .12028
/rpt family="(CCG)n"
12084. .12161
/rpt family="G-rich"
complement (12722. .128)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3538. .13667
rpt_family="FLAM_C"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l647. .11688
rpt_family="(CA)n"
1960. .11991
                                                                                                                                                                                                                                                                                                                                                                             family="MIR3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     family="MIR3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3668. .14227
rpt_family="L2"
omplement(14228.
                                                                                                                                                                                                /udy. 7166
/rpt_family="L2"
7215. 777.
                                                                                                                            family="MIR"
                                                                                                                                                                                                                                                     family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                             rpt_family="L2"
755. .10140
                                                                                                                                                                                                                                                                                                                                                                                                                                                        .10149
family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          family="L3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3212. .13282
rpt family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3283. .13537
rpt_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4514. .14525
rpt_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .15991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 52.9
Matches 90; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                repeat_region
                                                                                                              repeat_region
                                                                                                                                              repeat_region
                                                                                                                                                                         repeat_region
                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
```

17 CAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTT 76

HTG 27-AUG-2000

linear

DNA

215467 bp

AC013420

RESULT 15 AC013420 LOCUS

ö

Gaps

0

DB 9; Length 147760; 80; Indels

```
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                         S Muzny, D.M., Adams, C., Bailey, M., Barbaria, J., Blankenburg, K., Bodota, B., Bouck, J., Baroks, A., Buhay, C., Bunac, C., Burrows, J., Carter, M., Bacoks, A., Buhay, C., Bunac, C., Burket, C., Burrows, J., Carter, M., Chacko, J., Chen, Z., Cox, C., David, R., Delgado, O., Deshazo, D., Ding, Y., Domah-Rashid, N., Dugan-Rocha, S., Durbin, K. J., Fernandez, C., Ferraguto, D., Forcum-Tansey, J., Frantz, P., Ganesh, R., Gorrell, J.H., Gorrell, J.H., Gorrell, J., Holloway, C., Hosak, H., Jackson, L.E., Jackson, A., Hogues, M., Holloway, C., Hosak, H., Jackson, L.E., Jackson, A., Hogues, M., Kally, S., Kondejewski, N., Kong, Y., Kovar, C., Leal, B., Li, Z., Lichtarge, O., Liu, J., Liu, W., Logan, O., Lozado, R.J., Lu, J., Lucier, R., Martin, R., Martin, R., Nayen, N., Nayen, N., Nayen, S., Oswal, G., Parish, B., Paxcon, S., Paxcon, S., Paxcon, S., Paxcon, S., Paxcon, S., San, J., Scherer, S., Shah, S., Shen, H., Simon, M., Samuel, S., Say, J., Scherer, S., Yabon, H., Simon, M., Samel, S., Say, J., Scherer, S., Wallington, S., Wellnstock, G., Weinstock, I. R., Williamson, A., Nayen, R., Nayen, R., Welley, K., Wren, J., Wrensford, G., Yu, W., Zhou, X., Nelson, D. and A., Nelson, R., Welle, R., Nelson, D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Assembly program: Phrap, version 0.990329
Consensus quality: 175806 bases at least Q40
Consensus quality: 195338 bases at least Q30
Consensus quality: 202378 bases at least Q20
Estimated insert size: 207191; sum-of-contigs estimation
Batimated insert size: 249405; agarose-fp estimation
Quality coverage: 2.7x in Q20 bases; agarose-fp estimation
Ouality coverage: 3.3x in Q20 bases; sum-of-contigs estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NOTE: Batimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft_data.html).
NOTE: This is a 'working draft' sequence. It currently consists of 19 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (10-NOV-1999) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On Aug 26, 2000 this sequence version replaced gi:9719539.
                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
   Homo sapiens clone RP11-619F23, WORKING DRAFT SEQUENCE, 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequencing vector: M13; L08821
Chemistry: Dye-terminator Big Dye: 100% of reads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30720: contig of 30720 bp in length 30820: gap of unknown length 57766: contig of 26946 bp in length 79135: contig of 21269 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Center: Baylor College of Medicine
Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center clone name: RP11-619F23
                                                                                                                   HTG; HTGS PHASE1; HTGS DRAFT Homo sapiens.
                                                              AC013420
AC013420.13 GI:9929508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 215467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Worley, K.C.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     be preserved
                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30821
57767
57867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30721
                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
```

COMMENT

```
190521 TTTATTTTGGGTTTCTTTGCTCCTCTTTCCCCCTTTCCTGTCTTATATTAAAGGAATTGT 190580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           190581 recaratretretrifitriaaarrificricerrearaacricraearearearicricric 190640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81 AGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141 AACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 CATAAAATTTGAAATAAATTATGAGCTCCATGATATGCTATATTGGTTTTTACCTTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 18.6%; Score 41.8; DB 2; Length 215467; Best Local Similarity 50.2%; Pred. No. 3.9; Matches 103; Conservative 0; Mismatches 102; Indels 0;
                                                                               contig of 14614 bp in length
gap of unknown length
contig of 11042 bp in length
gap of unknown length
contig of 1235 bp in length
gap of unknown length
contig of 8647 bp in length
gap of unknown length contig of 15716 bp in length gap of unknown length contig of 14845 bp in length gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1860 others
                                                                                                                                                                                                                                                  contig of 8053 bp in length
gap of unknown length
contig of 7629 bp in length
                                                                                                                                                                                                                 6996 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                     contig of 3302 bp in length
gap of unknown length
                                                                                                                                                                                                                                                                                                                    contig of 4770 bp in length
                                                                                                                                                                                                                                                                                                                                                     bp in length
                                                                                                                                                                                                                                                                                                                                                                                      bp in length
                                                                                                                                                                                                   ength
                                                                                                                                                                                                                                    ength
                                                                                                                                                                                                                                                                                                      ength.
                                                                                                                                                                                                                                                                                                                                       ength
                                                                                                                                                                                                                                                                                                                                                                        endth
                                                                                                                                                                                                                                                                                                                                                                                                         ength
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ength.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      contig of 3552 bp
gap of unknown len
contig of 1180 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49030 g 55779 t
                                                                                                                                                                                                                                                                                                      unknown
                                                                                                                                                                                                                                                                                                                                       gap of unknown
contig of 4550
                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                                                                                      contig of 2875
gap of unknown
                                                                                                                                                                                                     unknown
                                                                                                                                                                                                                                                                                                                                                                        unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             190641 rccracicarracicriririri 190665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201 AATCAATTAGGAATTTTTTTTTT 225
                                                                                                                                                                                                  gap of unk
contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .one="RP11-619F23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      location/Qualifiers
                                                                                                                                                                                                                                  gap of
                                                                                                                                                                                                                                                                                                                                                                        gap of
                                                                                                                                                                                                                                                                                                      gap of
                                                                                                                                                                                                                                                                                                                                                                                                                       210535:
                                                                                                                                                                                                                                                                                                                                                                                                     207233:
                                                                                                                    150488:
                                                                                                                                   150588:
                                                                                                                                                     162913:
                                                                                                                                                                  163013:
                                                                                                                                                                                     171660:
                                                                                                                                                                                                                     178756:
                                                                                                                                                                                                                                                                   187009:
                                                                                                                                                                                                                                                                                      194638:
                                                                                                                                                                                                                                                                                                      194738:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        214187:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       214287:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          215467:
                                                                                                                                150489
                                                                                                                                                                                                                                                  178857
                 93972
                                                109788
124633
124733
139347
                                                                                                                                                                                                                 171761
                                                                                                                                                                                                                                                                                   87010
                                                                                                                                                                                                                                                                                                                                                                                      204259
                                                                                                                                                                                                                                                                                                      94639
                                                                                                                                                                                                                                                                                                                                       99509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         214288
                                  09688
                                                                                                                    39447
                                                                                                                                                                                                                                                                                                                                                     99609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          58444 a
                                                                                                                                                                                                   71661
```

Search completed: June 7, 2003, 20:57:10 Job time : 1311 secs

THIS PAGE BLANK (USPTO)

Sequence:

Run on:

Searched:

44: /cgn2_6/ptodata/1/pna/US6000_COMB.seg:* Ouerv Result June 9, 2003, 08:36:50 ; Search time 1687 Seconds (without alignments) 3353.325 Million cell updates/sec 49582208 Pending Patents NA Main:*

1: /cgn2_6/ptodata/1/pna/US06_COMB.seq:*
2: /cgn2_6/ptodata/1/pna/US06_COMB.seq:*
4: /cgn2_6/ptodata/1/pna/US07_COMB.seq:*
5: /cgn2_6/ptodata/1/pna/US08_COMB.seq:*
6: /cgn2_6/ptodata/1/pna/US081_COMB.seq:*
7: /cgn2_6/ptodata/1/pna/US081_COMB.seq:*
8: /cgn2_6/ptodata/1/pna/US081_COMB.seq:*
9: /cgn2_6/ptodata/1/pna/US081_COMB.seq:*
10: /cgn2_6/ptodata/1/pna/US081_COMB.seq:*
11: /cgn2_6/ptodata/1/pna/US082_COMB.seq:*
11: /cgn2_6/ptodata/1/pna/US082_COMB.seq:*
11: /cgn2_6/ptodata/1/pna/US082_COMB.seq:*
13: /cgn2_6/ptodata/1/pna/US082_COMB.seq:*
14: /cgn2_6/ptodata/1/pna/US082_COMB.seq:*
15: /cgn2_6/ptodata/1/pna/US093_COMB.seq:*
16: /cgn2_6/ptodata/1/pna/US093_COMB.seq:*
17: /cgn2_6/ptodata/1/pna/US093_COMB.seq:*
18: /cgn2_6/ptodata/1/pna/US093_COMB.seq:*
19: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
10: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
11: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
12: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
13: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
14: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
15: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
16: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
17: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
18: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
19: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
10: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
11: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
12: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
13: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
14: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
15: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
16: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
17: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
18: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
19: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
19: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
19: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
19: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
10: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
10: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
10: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
10: /cgn2_6/ptodata/1/pna/US095B_COMB.seq:*
10: /cgn2_6/ptodata/1/pna 12 6/ptodata/1/pna/US095D COMB.seq: 12 6/ptodata/1/pna/US095D COMB.seq: 12 6/ptodata/1/pna/US096A COMB.seq: 12 6/ptodata/1/pna/US096C COMB.seq: 12 6/ptodata/1/pna/US096C COMB.seq: 12 6/ptodata/1/pna/US096D COMB.seq: 12 6/ptodata/1/pna/US097A COMB.seq: 12 6/ptodata/1/pna/US097A COMB.seq: 12 6/ptodata/1/pna/US097A COMB.seq: 12 6/ptodata/1/pna/US098A COMB.seq: 12 6/ptodata/1/pna/US098A COMB.seq: 12 6/ptodata/1/pna/US099A COMB.seq: 12 6/ptodata/1/pna/US099A COMB.seq: 12 6/ptodata/1/pna/US099A COMB.seq: 12 6/ptodata/1/pna/US099B COMB.seq: 12 6/ptodata/1/pna/US099B COMB.seq: 12 6/ptodata/1/pna/US099B COMB.seq: 12 6/ptodata/1/pna/US099B COMB.seq: 12 6/ptodata/1/pna/US109A COMB.seq: 12 6/ptodata/1/pna/US109A COMB.seq: 12 6/ptodata/1/pna/US101A COMB.seq: 12 6/ptodata/1/pna/US101A COMB.seq: 12 6/ptodata/1/pna/US101B COMB.seq: 12 6/ptodata/1/pna/US101B COMB.seq: 13 6/ptodata/1/pna/US101B COMB.seq: 14 6/ptodata/1/pna/US101B COMB /cgn2_6/ptodata/1/pna/US102A_COMB.seq: /cgn2_6/ptodata/1/pna/US102B_COMB.seq: GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd. 24791104 segs, 12571243825 residues al number of hits satisfying chosen parameters: Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries - nucleic search, using sw model IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Minimum DB seq length: 0 Maximum DB seq length: 200000000 US-09-765-231A-58 225 Title: Perfect score: Scoring table: OM nucleic **Database** :

5.8 w/ 09176523/Page Schnize Seg. 10

																																									•
													•																												(
יין אַריסיים יאויש יי אַריסיים יי	n2_6/ptodata/1/pna/US6001_COMB.s	gn2_6/ptodata/1/pna/US6002_COMB.s	gn2_6/ptodata/1/pna/US6003_C	gn2_6/ptodata/1/pna/US6004	n2_6/ptodata/1/pna/US6005_C	<pre>0: /cgn2_6/ptodata/1/pna/US6006_C</pre>	1: /cgn2_6/ptodata/1/pna/US6007_C	2: /cgn2_6/ptodata/1/pna/US6008_C	3: /cgn2_6/ptodata/1/pna/US6009	4: /cgn2_6/ptodata/1/pna/US6010_C	5: /cgn2_6/ptodata/1/pna/US6011_C	: /cgn2_6/ptodata/1/pna/US6012_COMB.s	7: /cgn2_6/ptodata/1/pna/US6013_C	8: /cgn2_6/ptodata/1/pna/US6014_C	9: /cgn2_6/ptodata/1/pna/US6015_C	<pre>0: /cgn2_6/ptodata/1/pna/US6016_C</pre>	1: /cgn2_6/ptodata/1/pna/US6017_C	2: /cgn2_6/ptodata/1/pna/US6018_C	3: /cgn2_6/ptodata/1/pna/US6019_C	4: /cgn2_6/ptodata/1/pna/US6020_C	5: /cgn2_6/ptodata/1/pna/US6021_C	6: /cgn2_6/ptodata/1/pna/US6022_C	7: /cgn2_6/ptodata/1/pna/US6023_C	8: /cgn2_6/ptodata/1/pna/US6024_C	2_6/ptodata/1/pna/US6025_C	<pre>0: /cgn2_6/ptodata/1/pna/US6026_C</pre>	n2_6/ptodata/1/pna/US	gn2_6/ptodata/1/pna/US6028_C	gn2_6/ptodata/1/pna/US6029_C	3n2_6/ptodata/1/pna/US6030_C	gn2_6/ptodata/1/pna/US6031_COMB.	gn2_6/ptodata/1/pna/US6032_COMB.s	: /cgn2_6/ptodata/1/pna/US6033_COMB.s	gn2_6/ptodata/1/pna/US6034_COMB.	9: /cgn2_6/ptodata/1/pna/US6035_COMB.s	gn2_6/ptodata/1/pna/US6036_COMB.s	1: /cgn2_6/ptodata/1/pna/US6037_COMB.s	2: /cgn2_6/ptodata/1/pna/US6038_COMB.s	nz_6/ptodata/1/pna/US6U39_COMB.8	4: /cgnz_e/prodaca/1/pna/0se040_C 5: /cgnz_6/ptodata/1/pna/US6041_C	 the the supplication of the problem of the tenth of the t
																																									4
																																									,

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Score Match Length DB ID	,.J	ength D	 m	Q	Description
- 1	, ,		1	***************************************	
225 100.0 225			06	US-09-765-231A-58	Seguence 58, Appl
100.0			61	US-60-176-523-58	Sequence 58, Appl
100.0			18	US-09-495-050A-271	Sequence 271, App
100.0			55	US-60-118-318-159	Sequence 159, App
95.1	_		61	US-60-172-360-2785	Sequence 2785, Ap
		_	25	US-09-649-163-7215	Sequence 7215, Ap
87.1	_	_	25	US-09-652-109-8606	Sequence 8606, Ap
81.3	98	_	27	US-09-698-010-152	Sequence 152, App
76.4			25	US-09-649-163-9422	Sequence 9422, Ap
172 76.4 1183			27	US-09-698-010-11426	Sequence 11426, A
20.1 16		9	-	PCT-US97-14900A-1	Sequence 1, Appli
20.1		9	13	US-08-916-421-1	Sequence 1, Appli
	٠,	9	13	US-08-916-421B-1	Sequence 1, Appli
18.8		~	81	US-60-377-240-2534	Sequence 2534, Ap
				US-09-790-482-3984	Seguence 3984, Ap
18.1		_		US-09-553-094-9112	Sequence 9112, Ap
17.8		_		US-10-221-613-173	Sequence 173, App
17.6		_	22	US-09-577-410-7932	Sequence 7932, Ap
Φ,		_		US-09-534-859-279	Sequence 279, App
17.5		00	31	US-09-803-736-279	279,
17.4		L.	31	US-09-821-837-3726	3726.

```
Sequence 58, Application US/09765231A
GENERAL INFORMATION:
Sequence 58, Application US/09765231A
GENERAL INFORMATION:
APPLICANT: SATIE/Monsanto
APPLICANT: Phippard, Deborah
APPLICANT: Dotson, Stanton
APPLICANT: Dotson, Stanton
APPLICANT: Ma, Xiao-Jun
TITLE OF INVENTION: Osteoarthritis tissue-derived nucleic acids, polypeptides,
TITLE OF INVENTION: Osteoarthritis tissue-derived nucleic acids, polypeptides,
TITLE OF INVENTION: US/09/765,231A
CURRENT APPLICATION NUMBER: US/09/765,231A
CURRENT FILING DATE: 2001-01-18
NUMBER OF SEQ ID NOS: 82
LENGTH: 225
                                                                                                                                                                         1, Appli
138837,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                         46765, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09
                                                                                                                                                                                                              138837,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                          Sequence
Sequence
Sequence
Sequence
                                                                                                                     Sequence
                                                                                                                                                                                                                                                  Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                      Sequence
                                                                                                                                                                           Sequence
                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                              Sequence
                          Seguence
                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 225;
                                                                                                                                 US-09-399-932-4986
US-09-399-932-4986
US-09-790-988-1
US-09-634-3068-138837
US-10-027-632-138837
US-09-362-510A-50276
US-09-904-013-50276
US-09-698-013-7217
US-60-243-468-429
US-60-243-742-70
US-09-2865-412A-51898
US-09-248-797-52038
US-09-25-564-22038
                                                                                                                                                                                        -09-634-306B-138837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 225; DB 30;
100.0%; Pred. No. 1.6e-38;
                                                                                                                                                                                                                                                                                                                                                              US-09-654-617-341043
                                                                                                                                                                                                                             -09-815-264-46765
-09-620-392-58745
                                                                                                                                                                                                                                                                  -09-702-134-17932
-09-815-264-76784
                                                                                                                                                                                                                                                                                                                                                                                                   US-60-145-485-8758
                                                                                                                                                                                                                                                                                                      US-09-997-722-292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 100.
Matches 225; Conservative
                                                                                                                                                                                                                                                                                                      96588
96588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-765-231A-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JS-09-765-231A-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

TCCCCCAAAAAACGAAACAAAACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCAT 180 121 TCCCCCAAAAACGAAACAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCAT 180

121

ò

g

181

δ

RESULT 2 US-60-176-523-58

```
APPLICANT: Roopa, Reddy
APPLICANT: Roopa, Reddy
APPLICANT: Roopa, Reddy
APPLICANT: Roopa, Stal, J.
APPLICANT: Au-Young, Janice
TITLE OF INVENTION: COMPOSITION FOR DETECTION OF GENES ENCODING MEMBRANE-ASSOCIATED PF
FILE REFERENCE: PA-0013 US
CURRENT APPLICATION NUMBER: US/09/495,050A
CURRENT APPLICATION NUMBER: 60/118,318
PRIOR APPLICATION NUMBER: 60/118,318
PRIOR FILING DATE: Pebruary 1, 1999
NUMBER OF SEQ ID NOS: 305
SOFTWARE: PERL PROGram
SEQ ID NO 271
LIENGTH: 320
                  GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Searle/Monsanto
APPLICANT: Phippard, Deborah
APPLICANT: Phippard, Deborah
APPLICANT: Detson, Stanton
APPLICANT: Ma. Xiao-Jun
APPLICANT: Ma. Xiao-Jun
TITLE OF INVENTION: Osteoarthritis tissue-derived nucleic acids, polypeptides,
TITLE OF INVENTION: vectors, and cells
TITLE OF INVENTION: vectors, and cells
TITLE OF INVENTION: Vectors, and cells
CURRENT FILING DATE: 2000-01-18
CURRENT FILING DATE: 2000-01-18
SEQ ID NOS: 82
LENGTH: 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 ATATIGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGTC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCCCCAAAAAACGAAACAAAACAAAAAAAAAACTTTTTAAGAGTTGATGGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 TCCCCCAAAAAACGAAACAAAACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTÇAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 IGATGGTAAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGCTCCATGATAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATTAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 TIGATCIGCCICCICIGATCAATTAGGAATTITITITIT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 225; DB 18; Best Local Similarity 100.0%; Pred. No. 1.7e-38; Matches 225; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 225; DB 61;
100.0%; Pred. No. 1.6e-38;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature
CTHER INFORMATION: Incyte ID No: 4132547CT1
US-09-495-050A-271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
8.09-495-050A-271
; Sequence 271, Application US/09495050A
; GENERAL INFORMATION:
Sequence 58, Application US/60176523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 225; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Homo sapiens
US-60-176-523-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
```

```
120
                                                                                                                                                                                                                                                                                                                                                                         121 TCCCCCAAAAAAGGAAACAAAAAGAAAAAAAAACAACCTTTTTAAGGGTTGATGGCTACTCA 180
                                                                                                                                                                                                                                                                                                      61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                 TCCCCCAAAAACGAAACAAAAC-AAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCA 179
                                                                                                                                                                                                                    1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATTAAATTATGAGGCTCCATGATATGCT 60
                                                                                                                                                                                                                                                              61 ATATIGGTITIACCTICAGAAGAATAITIAGIITICACTCAGGTITITCAAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 GGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCA
                                                                                                                                                                           1 TGATGGTAAGTTGTTTCAGGCATAAATTTGAAATTAAAATTATGAGGCTCCATGATATGCT
                                                                                                                                   Gaps
                                                                                                                                 .;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ĥ
                                                                                         Length 1025;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Shyjan, Andrew W.
TITLE OF INVENTION: NOVEL NUCLEIC ACID MOLECULES AND USES
TITLE OF INVENTION: NEBREPOR
FILE REFERENCE: 1600.1164-001
CURRENT FILING DATE: 2000-08-25
PRIOR APPLICATION NUMBER: 06/150,608
PRIOR PILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 10535
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7215
LENGTH: 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                       Score 214; DB 61;
Pred. No. 4.6e-36;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

87.1%; Score 196; DB 25;
Best Local Similarity 99.5%; Pred. No. 3.4e-32;
Matches 207; Conservative 0; Mismatches 0;
i NAME/KEY: misc_feature
i OTHER INFORMATION: Incyte ID No: 115406.1
US-60-172-360-2785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Villeval, Jean-Luc M.G. . . Goodearl, Andrew D.J. Silos-Santiago, Inmaculada White, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 7215, Application US/09649163 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
LOCATION: (1)...(1097)
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Holtzman, Douglas A.
Galvin, Katherine A.
Leiby, Kevin R.
Kingsbury, Gillian A.
Weich, Nadine S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Williamson, Mark
Richardson, Jennifer
MacBeth, Kyle J.
Fraser, Christopher C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan, Yang
Busfield, Samantha J.
Deeds, James
Lee, John
                                                                                    Query Match
Best Local Similarity 99.6%;
Matches 225; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            McCarthy, Sean A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-09-649-163-7215
                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2785, Application US/60172360
GENERAL INFORMATION:
APPLICANT: Morria, MacDonald
APPLICANT: Lal, Freet;
APPLICANT: Diep, Dinh
TITLE OF INVENTION: Method for the Identification of Sequence Polymorphisms Using
TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide Polymorp
FILE REPERENCE: GX-0007 P
CURRENT APPLICATION NUMBER: US/60/172,360
CURRENT FILING DATE: 1999-12-16
NUMBER OF SEQ ID NOS: 29838
SOFTWARE: PERL Program
                                                                                                                                                                                                                                                                                                                                        APPLICANT: Roops, Reddy
APPLICANT: Guegler, Karl, J.
APPLICANT: Guegler, Karl, J.
APPLICANT: Guegler, Karl, J.
APPLICANT: Au-Young, Janice
TITLE OF INVENTION: COMPOSITION FOR DETECTION OF GENES ENCODING MEMBRANE-ASSOCIATED
FILE REPERENCE: PA-0013 P
FULE REPERENCE: PA-0013 P
CURRENT PILING DATE: 1999-02-01
NUMBER OF SEQ ID NOS: 306
SOFTWARE: PERL Program
SOFTWARE: PERL Program
SEQ ID NO 159
LENGTH: 320
                                                                                           ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                              TCCCCCAAAAAACGAAACAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCCCCAAAAACGAAACAAAAAAAAAACAAACTTTTTAAGAGTTGATGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCCCCAAAAAACGAAACAAAAAAAAACCTTTTTAAGAGTTGATGGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGATGGTAAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 100.0%; Score 225; DB 55; Length 320; Best Local Similarity 100.0%; Pred. No. 1.7e-38; Matches 225; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                              ; Sequence 159, Application US/60118318 ; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: 4132547CT1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
US-60-172-360-2785
                                                                                                                                                                                                                                                                                US-60-118-318-159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-60-118-318-159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 2785
LENGTH: 1025
                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PEATURE: -
                                                                                                    121
                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                      61
                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                    8
                                                                                                                                                                                         ద
                                                              ò
                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1092 GGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCA 1033
1092 GGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCA 1033
                                                                                                      1032 GAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGGCTACGCTGTCCCCCAAAAAACGAAA 973
                                                                                                                                                                                                             972 CAAAACAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTG 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        79 GAAGAATATTTAGTTTCACTCAGGTTTTTCAAA-GCTACGCTGTCCCCCAAAAAACGAAA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032 GAAGAATATTTAGTTTCACTCAGGTTTTTTCAAAGGCTACGCTGTCCCCCCAAAAAAAGAAA 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            138 CAAAACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTG 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               972 CAAAACAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTG 913
                                                                                                                                                          138 CAAAACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTG 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 GGCATAAAATTTGAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCA 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 87.1%; Score 196; DB 25; Length 1097; Best Local Similarity 99.5%; Pred. No. 3.4e-32; Matches 207; Conservative 0; Mismatches 0; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT:
MILLIAMSON, MARK
APPLICANT:
SIPJAN, ANDREW W.
TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/09/698,010
CURRENT APPLICATION NUMBER: 00/162,358
PRIOR FILING DATE: 1999-10-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: NOVEL NUCLEIC ACID MOLECULES AND USES TITLE OF INVENTION: NOVEL NUCLEIC ACID MOLECULES AND USES TITLE OF INVENTION: THEREFOR FILE REFERENCE: 1600.1180-001
CURRENT APPLICATION NUMBER: US/09/652,109
CURRENT FILING DATE: 2000-08-30
PRIOR FILING DATE: 1999-08-30
NUMBER OF SEQ ID NOS: 10105
SOFTWARE: FASISEQ for Windows Version 4.0
SEQ ID NO 8606
                                                                                                                                                                                                                                                                                              912 CTGAATCAATTAGGAATTTTTTTTTTT 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           912 CTGAATCAATTAGGAATTTTTTTTTTT 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  198 CTGAATCAATTAGGAATTTTTTTTTT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 8606, Application US/09652109
                                                      79 GAAGAATATTTAGTTTCACTCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LOCATION: (1)...(1097)
; OTHER INFORMATION: n = A,T,C or G
US-09-652-109-8606
                                                                                                                                                                                                                                                                198 CTGAATCAATTAGGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
LOCATION: (1)...(1097)
                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-652-109-8606/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
US-09-698-010-152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                   ሯ
                                                                                                      a
                                                                                                                                                          ò
                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

```
72 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATTAAATTATGAGGCTCC-CATGATATG 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      131 CTTTTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAG--TCGCTG 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    189 rcccccaaaaaccaaacaaacaaaacaaaacaaccrrrrraacacricarccar 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 TGATGGTAAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1183;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 27; Length 860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     249 rigarciecereceresareareariadaariririririr 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 81.3%; Score 183; DB 27; Length 8. Best Local Similarity 94.2%; Pred. No. 2e-29; . Matches 212; Conservative 0; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: NOVEL NUCLEIC ACID MOLECULES AND USES TITLE OF INVENTION: THEREFOR FILE REFERENCE: 1600.1164-001 CURRENT APPLICATION NUMBER: US/99/649,163 CURRENT FILING DATE: 2000-08-25 FRICA REPLICATION NUMBER: 06/150,608 FRICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 172; DB 25;
Pred. No. 4.9e-27;
NUMBER OF SEQ ID NOS: 15684
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Villeval, Jean-Iuc M.G.
Goodearl, Andrew D.J.
Silos-Santiago, Inmaculada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 9422, Application US/09649163
GENERAL INFORMATION:
                                               SOFTWARE: FastSEQ for Windows Versio; SEQ ID NO 152; LENGTH: 860; TYPE: DNA ORGANISM: Homo sapiens; FARTURE: NAME/KEY: misc_feature; LOCATION: (1)...(860); OTHER INFORMATION: n = A,T,C or G US-09-698-010-152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Christopher C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pan, Yang
Busfield, Samantha J.
Deeds, James
Lee, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kingsbury, Gillian A.
Weich, Nadine S.
McCarthy, Sean A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Williamson, Mark
Richardson, Jennifer
MacBeth, Kyle J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Holtzman, Douglas A.
Galvin, Katherine A.
Leiby, Kevin R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        76.4%;
89.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      White, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
US-09-649-163-9422
```

```
CLASSIFICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US97-14900A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-916-421-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCTATATTGGTTTTACCTTCAGA----AGAATATTTAGTTTCACTCAGGTTTTTCAAA 1111
                                                                                                                                                     135 ATGCTATATTGGTTTTACCCCTTCAGAAGAAAATATTTAGTTTCACTCAGGTTTTTCAAA 194
                                                                                                                                                                                           135 AIGCTATATIGGTITIACCCCTICAGAAGAAATATITAGTITICACTCAGGTITITICAAA 194
                                                         195 GCTACGCTGTCCCCCAAAAAACAAAAAAAAAAAAAAAACAACCTTTTAAGAGTTGATG 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56 ATGCTATATTGGTTTTACCTTCAGA----AGAATATTTAGTTTCACTCAGGTTTTCAAA 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGATGGTAAGTTGTTTCAGGCATAAATTTTGAAATAA----ATTATGAGGCTCCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAA----ATTATGAGGCTCCATGAT
   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gарв
                                                                                                                                                                                                                                                                                                      ..
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 172; DB 27; Length 1183; Pred. No. 4.9e-27; 0; Mismatches 15; Indels 9
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Williameon, Mark
APPLICANT: Williameon, Mark
TITLE OF INVENTION: NOVEL NUCLEIC ACID MOLECULES AND USES
TITLE OF INVENTION: THEREFOR
FILE REFERENCE: 1600.2029-001
CURRENT APPLICATION NUMBER: US/09/698,010
CURRENT PILING DATE: 2000-10.27
PRIOR PILING DATE: 1999-10-29
NUMBER OF SEQ ID NOS: 15684
SOFTWARE: FRESCO for Windows Version 4.0
SEQ ID NO 1426
 15; Indels
                                                                                                                                                                                                                                                                    172 GCTACTCATTTGATCTGCCTCCTCTGCTGAATCAATTAGGAATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        THE INSTITUTE FOR GENOMIC RESEARCH 9712 MEDICAL CENTER DRIVE ROCKVILLE, MD 20850 UNITED STATES OF AMERICA MICROBIOLOGY DEPARTMENT CHAMPAIGN-URBANA, IL 61801 UNITED STATES OF AMERICA SCHOOL OF MEDICINE
 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          76.4%; Score 172;
89.7%; Pred. No. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application PC/TUS9714900A
GENERAL INFORMATION:
APPLICANT: THE INSTITUTE FOR GENOMIC
APPLICANT: 9712 MEDICAL CENTER DRIVE
APPLICANT: ROCKVILLE, MD 20850
APPLICANT: NITED STATES OF AMERICA
APPLICANT: WICROBIOLOGY DEPRATMENT
APPLICANT: CHAMPAIGN-URBANA, IL 61801
APPLICANT: CHAMPAIGN-URBANA, IL 61801
APPLICANT: SCHOOL OF MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 11426, Application US/09698010
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 89.7
Matches 210; Conservative
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                    09-698-010-11426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-698-010-11426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCT-US97-14900A-1
210;
                                                                                                                 26
                                                                                                                                                                                           112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Matches
                                                                     요
                                                                                                                                                 셤
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                               ઠે
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                         ò
```

```
151463 TCTTTATCAATAGCCTCTTCTAAAATCTTCTCGTAAATTTTTAAAACTCCGGAGTTGTCT 151522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    151523 AAAAATCTATAAAAATCAATTATTACTCTTTTTCCAATACTCTTTAATTTGTTTTTTTATC 151582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151403 TAAATCTCTGCAGCCCTTCTATTTCCATCATTATTATAGCTACATGTTTTGGTAAATTG 151462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67 GITTTACCTICAGAAGAATATITTAGTITTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCC 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                         APPLICANT: UNIL.
APPLICANT: APPLICANTS/LN.
APPLICANT: White, Owen R.
APPLICANT: White, Owen R.
APPLICANT: White, Owen R.
APPLICANT: White, Owen R.
APPLICANT: Weese, Carl R.
APPLICANT: Venter, J. Craig
TITLE OF INVENTION: Complete Genome Sequence of the Methanogenic
TITLE OF INVENTION: Archaeon, Methanococcus jannaschii
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 New York Avenue, NW, Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127 AAAAAACGAAACAAAACAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 TAAGTIGITICAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1664976;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 45.2; DB 1; Length 1
Pred. No. 24;
0; Mismatches 103; Indels
DEPARTMENT OF MOLECULAR BIOLOGY AND GENETICS BALLTIMORE, MD 21205
BALTTMORE, MD 21205
BALTTMORY OF AMERICA APPLICANTS/INVENTORS: Bult, Carol J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-DOS/WS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US97/14900A
FILING DATE: 22-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              151583 TTACCCAAAATCCCCACCTATTAGGAATTT 151612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187 TGCCTCCTCTGCTGAATCAATTAGGAATTT 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/024,428
FILING DATE: 22-AUG-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 20005-1934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/08916421
GENERAL INFORMATION:
APPLICANT: Bult, Carol J.
APPLICANT: White, Owen R.
APPLICANT: Smith, Hamilton O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Eric K. Steffe
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 148
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1664976 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (202) 371-2500
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1664976 base pair:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (202) 371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 51.0
Matches 107; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
```

```
or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ör
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ör
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ör
                                                                                                                                                                                                                                                                                                                                                                                                                 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            or
                                                                                                           TYPE: DNA ORGANISM: Methanococcus jannaschii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
LOCATION: (234187). (234187)
OTHER INFORMATION: n equals a, t,
NAME/KEY: misc_feature
LOCATION: (234220). (234220)
OTHER INFORMATION: n equals a, t,
NAME/KEY: misc_feature
LOCATION: (234814).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
LOCATION: (312837)..(312837)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc feature
LOCATION: (103998)..(103998)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                   LOCATION: (28257)...(28258)
OTHER INFORMATION: n equals a,
NAME/KEY: misc. feature
LOCATION: (84773)...(84773)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: (84808)...(84808)
OTHER INFORMATION: n equals a,
NAME/KEY: misc feature
LOCATION: (84812).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ION: (981<u>2</u>0)..(98120)
INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAMEN TO STATE WAS A STATE OF THE STATE OF T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc feature
LOCATION: (191995)..(191995)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc feature
LOCATION: (309418)..(309418)
OTHER INFORMATION: n equals a,
                                                                                                                                                                               FEATURE:
NAME/KEY: misc feature
LOCATION: (28222)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: (04812) ...(84812)
OTHER INFORMATION: n equals a,
NAME/KEY: misc feature
LOCATION: (99120)...(98120)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: (98159)..(98159)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc feature
LOCATION: (191989) .. (191989)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCATION: (98266) .. (98266)
THER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATION: (98343)..(98343)
THER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc feature
LOCATION: (231980)..(231980)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION: n equals a,
SOFTWARE: Patentin version 3.1 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature
LOCATION: (98239)..(98239)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: (28257)..(28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (98159)..(98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/08916421B

Sequence 1, Application US/08916421B

GENERAL INFORMATION:

APPLICANT: Bull et al.

TITLE OF INVENTION: Complete Genome Sequence of the Methanogenic Archaeon, Methanococ TITLE OF INVENTION: januaschii

FILE REFERENCE: PB272

CURRENT APPLICATION NUMBER: US/08/916,421B

CURRENT FILING DATE: 1997-08-22

FRIOR APPLICATION NUMBER: US 60/024,428

PRIOR FILING DATE: 1996-08-22

NUMBER OF SEQ ID NOS: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        151523 AAAAATCTATAAAAATCAATTATTACTCTTTTTCCAATACTCTTTAATTTGTTTTTTATC 151582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151403 TÄÄÄÄTCTCTGCÄGCCCTTCTÄTTTCCÄTCCÄTTATTATAGCTACATGTTTTGGTÄAÄTTG 151462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   151463 TCTTTATCAATAGCCTCTTCTAAATCTTCTCGTAAATTTTTAAAACTCCGGAGTTGTCT 151522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67 GTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTTCAAAGCTACGCTGTCCCCC 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   127 AAAAAACGAAACAAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATC 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7 TAAGITGITICAGGCAIAAAATTIGAAATAAAATTATGAGGCTCCATGATATGCTATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                              APPLICANT: Venter, J. Craig
TITLE OF INVENTION: Complete Genome Sequence of the Methanogenic
TITLE OF INVENTION: Archaeon, Methanococcus jannaschii
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 New York Avenue, NW, Suite 600
CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1664976;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
20.1%; Score 45.2; DB 13; Length Best Local Similarity 51.0%; Pred. No. 24;
Matches 107; Conservative 0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/916,421
FILING DATE: 22-AUG-1997
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/024,428
FILING DATE: 22-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: Eric K. Steffe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           151583 TTACCCAAAATCCCCACCTATTAGGAATTT 151612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 187 IGCCTCCTCTGCTGAATCAATTAGGAATTT 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 1488.0290001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 36,688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPONE: (202) 371-2600
TELEFAX: (202) 371-2600
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1664976 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-916-421B-1
                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-916-421-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

D		n 6	ו	מ	מ	b	c	n	מ	מ	t	ח	מ		חכ	b		D)	0)	b	b		מ	מ	Б	0	,	þ	מ		מ
or	ğ		;	ő	ör	or	č	;	ŏ	ŏ	ć	;	or	3	5	or		or	ö		or	or		or	or	or	'n		ö	or		o Y
ú	Ü		j .	ů	ů	ů	c	ì	ບໍ່	ú	c	ì	ů		s`	ů		ů	ú		ú	ú		ບັ	ú	ΰ	ď		ů	ΰ		ΰ
ند	į,			ŭ	ŗ	ŗ,	1		ù	ŗ,		;	ţ,		ڌ	ŗ,		ť,	ŗ,		ŗ,	ŗ,		, ,	۲,	رب	į.		ŗ,	ű		ù
193) 18 a,	26) 18 a.	67)	41)			→	81)	03)		-	42)	3 5	-	84)	n () 18а,	76)		39) 18 a,	19)	$\overline{}$	4830) ls a,	9.	81	3881) 18 a,	0881) 1s a,	098B) 18 a.	m	_	9473) le a,	949	
(3129 equa	a C a	re (559	re (559	re du (600		equ.	re (6570 emia	re (657	egua re (6744	ed	40	re (713	ed	re (7416	re-dua re-	_	re (7796	egua re	; - -	re (8716	equa	. (108 equa	re . (109	dra	equa	. (113 equa	re .(131 equa	'n.	eg e		re . (13	equa re .(147
93)	featu 26) DN: n	eat 7)	eat 1)	featu 92)	ON: n featu		81)	a).	featu 35)			- a -	 Z	84)	eat of) Z	at: :	N: n eatu		featu 19)	2 4	30)	04:	Z 0 0		81) N:	featu 988). ON: n	ΝÕ	ON: n featu	73	91)	featu 091).
139	18 E	l ⊢ Ĥ	126	3 3 5	July 1	Ĭ.	101	101	1 0 4	Ĕ,	14 F	100	Ĕ.	10 1	180	ATI	90	MATI 180	1201	lvo	Ėυ	14 F	19	∃k	ÀÄ	I Sc	JOE H	ole M	Ĕυ	1349 MATI	1349	18C 1470
	은	<u>6</u>	8	2	윤	E.		8	2	. 윤 .	6		ũ.	6	2	. 2 2 :	 × z	ဥ္မ	ଜ		δ.	ဥ	8	?	၉ .	დ	0		ဂ္ဂ	Q	[2	
ATIO	~ ~ ~	E/KEY	E/KE	ATKE	8 Z Z	HER II	 α	\ F (E/KEY	~ ~	. ఓ ~		.~~		· 🔍 🛭	- :	~	~	. —	$\times H$	~	ATION ER IN	E/KEY		ER IN	ν Η α	<u> ~ ™ ~</u>	E/KEY	∝ ∖	ATIO	ATE	EK ATI
LOCA	A S S E	NAME/ LOCAT OTHER	LOCAT	NAME	O N C	353	LOCA	< O €	N N	O THE	LOCAT	NAN O	OTH	LOCA	NAME	OTHER	LOCA	N S	LOCAT	NAME/I	O A	LOCAT	LOCA:	28.5	OTHE	OTHE	LOCA,	NAME, LOCA	N A M	ŎF	Z Õ E	L N N
																	,			٠- ;-	. .											

151403 TAAATCTCTGCAGCCCTTCTATTTCCATCATTATATACCTACATGTTTTGGTAAATTG 151462 151463 TCTTTATCAATAGCCTCTTCTAAAATCTTCTCGTAAATTTTTTAAAACTCCGGAGTTGTCT 151522 151523 AAAAATCTATAAAAATCAATTATTACTCTTTTTCCAATACTCTTTAATTTGTTTTTTATC 151582 APPLICANT: Diggans, James C.
APPLICANT: Diggans, James C.
APPLICANT: Weak
APPLICANT: Weak
APPLICANT: Weak
TITLE OF INVENTION: Canine Gene Microarrays for Molecular Toxicology Modeling
FILE REPERENCE: 44921-5116-PR
CURRENT APPLICATION NUMBER: US/60/377,240
FRIOR APPLICATION NUMBER:
PRIOR FILING DATE: ö ö 148 67 GITTIACCTICAGAAGAATAITITAGITICACTCAGGITTITICAAAGCTACGCTGTCCCCC 126 477 CAATAATACATAGGTTTTTCAAAATTAGGTTTCAATAAAGAATACAGAGAAAGGAAAAT 418 537 TTGACATACATTTTGATGTATGTAGGCTATACAGAATGTACAAACCAAAGCTGTAT 478 99 7 TAAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTG 89 TAGTITCACTCAGGTITITCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAAAA 29 TTGAAATTAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATT 0; Gaps 0; Gaps DB 13; Length 1664976; Length 538; Score 45.2; DB 13; Length Pred. No. 24; 0; Mismatches 103; Indels Indels 68; DB 81; Score 42.2; DB Pred. No. 33; 0; Mismatches NAME/KEY: misc_feature
LOCATION: (1602912)..(1602912)
OTHER INPORMATION: n equals a, t, c, or g
NAME/KEY: misc_feature
LOCATION: (1603734)..(1603734)
OTHER INPORMATION: n equals a, t, c, or g
NAME/KEY: misc_feature
LOCATION: (1637998)..(1637998)
OTHER INFORMATION: n equals a, t, c, or g
NAME/KEY: misc_feature
LOCATION: (1664854)..(1664855)
OTHER INFORMATION: n equals a, t, c, or g 187 TGCCTCCTCTGCTGAATCAATTAGGAATTT 216 ρ or or RESULT 14
US-60-377-240-2534/c
; Sequence 2534, Application US/60377240
; GENERAL INFORMATION: ΰ ú NAME/KEY: misc_feature LOCATION: (1569020)..(1569020) OTHER INFORMATION: n equals a, n equals a, Query Match
Best Local Similarity 55.0%;
Matches 83; Conservative (Query Match 20.1%; Best Local Similarity 51.0%; Matches 107; Conservative NUMBER OF SEQ ID NOS: 11109 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 2534 LENGTH: 538 TYPE: DNA ORGANISM: Canis familiaris OTHER INFORMATION: US-60-377-240-2534 US-08-916-421B-1 FEATURE: ઠે 요 ò g ò 8 õ ò g ò g

```
83 AATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAAAA 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        154 TAAANTGTCGAANTCCCTACNTGACAACATTATAACTGTATGGGGGCTTAACTTTATAAG 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23 TAAAATTIGAAATAAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAG 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
18.3%; Score 41.2; DB 30; Length 401;
Best Local Similarity 55.5%; Pred. No. 51;
Matches 76; Conservative 0; Mismatches 61; Indels 0;
                                                                                                                                       Sequence 3984, Application US/09790482
GENERAL INFORMATION:
APPLICANT: Shrjan, Andrew W.
TITLE OF INVENTION: THEREFOR
FILE OF INVENTION: THEREFOR
FILE OF INVENTION: THEREFOR
CURRENT APPLICATION NUMBER: US/09/790,482
CURRENT FILING DATE: 2001-02-22
PRIOR FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 4377
SOFTWARE: FaetSEQ for Windows Version 4.0
SEQ ID NO 3984
                                   417 AACCACACATCCAACAACTCAGAACTTCTAA 387
149 AACAACCTTTTTAAGAGTTGATGGCTACTCA 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:

FEATURE:

NAME/KEY:

LOCATION: (1)...(401)

OTHER INFORMATION: n = A,T,C or G
US-09-790-482-3984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       143 CAAAAAACAACCTTTT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           34 AAAAAAAAAAGCrigi 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                        RESULT 15
US-09-790-482-3984/c
                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
  ઠે
```

varch completed: June 9, 2003, 09:40:39 b time: 1969 secs

```
Sequence 271, App Sequence 171, App Sequence 174, App Sequence 2534, Ap Sequence 180, App Sequence 570, A Sequence 57, A Sequence 57, A Sequence 1256, App Sequence 1256, App Sequence 1269, A Sequence 1757, A Sequence 26, App Sequence 26, App Sequence 31394, A Sequence 
                                                                                                                                                          9, 2003, 08:36:51 ; Search time 2538 Seconds (without alignments) 578.414 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                    US-09-765-231A-58
225
1 tgatggtaagttgtttcagg......attaggaatttttttt 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pending Patents NA New:*

1: /cgn2_6/ptodata/1/pna/PCT_NEW_COMB.seq:*

2: /cgn2_6/ptodata/1/pna/USO6_NEW_COMB.seq:*

3: /cgn2_6/ptodata/1/pna/USO8_NEW_COMB.seq:*

4: /cgn2_6/ptodata/1/pna/USO8_NEW_COMB.seq:*

5: /cgn2_6/ptodata/1/pna/USO8_NEW_COMB.seq:*

6: /cgn2_6/ptodata/1/pna/USO9_NEW_COMB.seq:*

7: /cgn2_6/ptodata/1/pna/USO9_NEW_COMB.seq:*

8: /cgn2_6/ptodata/1/pna/USO9_NEW_COMB.seq:*

9: /cgn2_6/ptodata/1/pna/USO9_NEW_COMB.seq:*

10: /cgn2_6/ptodata/1/pna/USO9_NEW_COMB.seq:*

11: /cgn2_6/ptodata/1/pna/USO0_NEW_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15156240
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0 320 9 US-10-313-542-271

1 164976 6 US-09-692-570-1

1 55496 10 US-00-692-570-1

2 5518 9 US-10-313-843-2534

6 763446 10 US-60-470-166-8943

2 5518 9 US-10-240-453-180

6 31312 10 US-60-465-241-52707

6 6 0615 8 US-10-427-741-9

2 343317 10 US-60-466-412-8455

2 343317 10 US-60-466-412-84536

2 343317 10 US-60-466-412-84536

2 15105345 5 US-09-948-128-55

9 12393 9 US-10-311-455-1236

1 209025 7 US-09-949-106-12609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     al number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7578120 seqs, 3262256734 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                            nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                    IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         June
                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB
Maximum DB
                                                                                                         OM nucleic
                                                                                                                                                                                                                                                                                                                                   Seguence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
```

```
APPLICANT: Roops, Reddy
APPLICANT: Guegler, Karl, J.
TITLE OF INVENTION: COMPOSITION FOR DETECTION OF GENES ENCODING MEMBRANE-ASSOCIATED PFILE REFERENCE: PA-0013 US.
CURRENT APPLICATION NUMBER: US/10/313,542
CURRENT FILING DATE: 2002-11-05
PRIOR APPLICATION NUMBER: US/09/495,050
PRIOR APPLICATION NUMBER: US/09/495,050
PRIOR APPLICATION NUMBER: GO/118,318
PRIOR FILING DATE: 1999-02-01
RUMBER OF SEQ ID NOS: 305
SOFTWARE: PERL Program
SEQ ID NO 271
LENGTH: 320
                       Sequence 297, App
Sequence 11165, A
Sequence 16189, A
Sequence 12598, A
Sequence 17179, A
Sequence 17519, A
Sequence 61, Appl
Sequence 63, Appl
Sequence 205123,
Sequence 12692, Appl
                                                                                                                                                                                                                                                                                                                                                Sequence 86424, A
Sequence 51766, A
Sequence 8709, A
Sequence 55, Appl
Sequence 1243, Appl
Sequence 1243, Appl
Sequence 1243, Appl
Sequence 8744, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTTCAAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATTAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATTGGTTTTTACCTTCAGAAGAATATTTAGTTTTCACTCAGGTTTTTCAAAGCTACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCCCCAAAAAACGAAACAAAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 TCCCCCAAAAAAGGAAACAAAAAAAAAAAACTTTTTAAGAGTTGATGGCTACTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-949-016-1259

US-09-949-016-12598

US-60-465-241-53179

US-60-465-12-87261

US-60-466-412-87261

US-09-949-016-17539

US-09-949-016-259

US-09-948-128-429

US-09-948-128-429

US-09-949-016-205123

US-09-949-016-205123

US-10-257-166-126-20

US-10-257-166-126-20

US-10-257-166-126-20

US-60-466-412-86424

US-60-466-412-86709

US-60-466-412-86709

US-60-466-412-86709

US-60-99-81-155-128-259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 225; DB 9; Best Local Similarity 100.0%; Pred. No. 2.4e-42; Matches 225; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-60-461-762-3375
US-60-470-166-8744
US-09-948-128-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No: 4132547CT1
US-10-313-542-271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 271, Application US/10313542 GENERAL INFORMATION:
2586 10
3258 11
47555 7 U
47555 7 U
60583 10
60583 10
21852 7
211522 7
550635 5
16.6 2586 116.6 32586 116.6 32586 116.5 47555 716.5 49673 716.5 2118940 716.2 218940 716.2 29913 116.2 196099 116.2 196099 716.2 495619 716.2 495619 716.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886 116.1 135886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

225

US-09-724-676-31394 US-09-724-676A-31394 US-10-170-235-7647 US-09-947-911-346 US-09-947-911-26

```
NAME/KEY: misc_feature
LOCATION: (234814)..(234814)
OTHER INFORMATION: n equals a, t, c, or
                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ör
  ö
                                                                                                or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc feature
LOCATION: (98159)..(98159)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
LOCATION: (148948)..(148948)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
LOCATION: (191989)..(191989)
DTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                      NAME/KEY: misc feature
LOCATION: (84808)..(84808)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
LOCATION: (84812)..(84812)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: misc feature
LOCATION: (98120) . (98120)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc feature
LOCATION: (103998)..(103998)
OTHER INFORMATION: n equals a,
                                                                                                               FEATURE:
NAME/KEY: misc feature
LOCATION: (84773) .. (84773)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc feature
LOCATION: (98266)..(98266)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc feature
LOCATION: (98343)..(98343)
JTHER INFORMATION: n equals a,
OTHER INFORMATION: n equals a,
                        FEATURE:
NAME/KEY: misc feature
LOCATION: (28257)..(28258)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
LOCATION: (98239)..(98239)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: (163385)..(163385)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (191995)..(191995)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAMEZKEY: misc feature
LOCATION: (231980)..(231980)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: (234220)..(234220)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc feature
LOCATION: (234187)..(234187)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Built et al.
APPLICANT: Built et al.
APPLICANT: Built et al.
TITLE OF INVENTION: Complete Genome Sequence of the Methanogenic Archaeon, Methanococ
TITLE OF INVENTION: Januaschii
FILE REFERENCE: PB275C1
CURRENT APPLICATION NUMBER: US/09/692,570
CURRENT PILING DATE: 1996-08-22
PRIOR FILING DATE: 1996-08-22
PRIOR APPLICATION NUMBER: US 08/916,421
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 1664976
                                                                                                                              APPLICANT: Roops, Reddy M.
APPLICANT: Roops, Reddy M.
APPLICANT: Guegler, Karl, J.
APPLICANT: Guegler, Karl, J.
APPLICANT: Al-Young, Janice K.
TITLE OF INVENTION: COMPOSITION FOR DETECTION OF GENES ENCODING MEMBRANE-ASSOCIATED TITLE OF INVENTION: PROTEINS
FILE REFERENCE: PA-0013-1 CON
CURRENT APPLICATION NUMBER: US/10/313,542A
CURRENT APPLICATION NUMBER: 09/495,050
PRIOR FILING DATE: 2000-01-31
PRIOR FILING DATE: 1999-02-01
NUMBER OF SEQ ID NOS: 305
SOFTWARE: PERL PROGRAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATATTGGTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTTCAAAGCTACGCTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCCCCAAAAAACGAAACAAAAAAAAAAAACCTTTTTAAGAGTTGATGGCTACTCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGCTCCATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TGATGGTAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 320,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 225; DB 9; 100.0%; Pred. No. 2.4e-42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No: 4132547CT1
US-10-313-542A-271
                                                                                              Sequence 271, Application US/10313542A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Methanococcus jannaschii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0
Matches 225; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: misc_feature
LOCATION: (28222)..(28222)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                          JS-10-313-542A-271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 271
LENGTH: 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-09-692-570-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
```

셤

g ò

ઠ

| SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR | SECURIOR 151403 TAAATCTCTGCAGCCCTTCTATTTCCATCATTATTATAGCTACATGTTTTGGTAAATTG 151462 151463 TCTTTATCAATAGCCTCTTCTAAATCTTCTCGTAAATTTTTTAAAACTCCGGAGTTGTCT 151522 151523 AAAAATCTATAAAAATCAATTATTACTCTTTTCCAATACTCTTTAATTTGTTTTTTATC 151582 ô 67 GTTTTACCTTCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCC 126 127 AAAAAACGAAACAAAACAAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATC 186 99 7 TAAGTTGTTTCAGGCATAAAATTTGAAATTAAATTATGAGCTCCATGATATGCTATATTG 0; Gaps Length 1664976; 0; Mismatches 103; Indels Query Match 20.1%; Score 45.2; DB 6; Best Local Similarity 51.0%; Pred. No. 0.35; Matches 107; Conservative 0; Mismatches 103; 151583 TTACCCAAAATCCCCACCTATTAGGAATTT 151612 187 TGCCTCCTCTGCTGAATCAATTAGGAATTT ö ö ö ö ö ö ö 9 ú NAME/KEY: misc_feature LOCATION: (1096846)..(1096846) OTHER INFORMATION: n equals a, t, NAME/KEY: misc feature LOCATION: (1349473)..(1349473) OTHER INFORMATION: n equals a, NAME/KEY: misc feature LOCATION: (1084830)...(1084830) OTHER INFORMATION: n equals a, NAME/KEY: misc_feature LOCATION: (1119881)..(1119881) OTHER INFORMATION: n equals a, NAME/KEY: misc feature LOCATION: (1130881)..(1130881) OTHER INFORMATION: n equals a, NAME/KEY: misc feature LOCATION: (1310988)..(1310988) OTHER INFORMATION: n equals a, NAME/KEY: misc feature LOCATION: (1313224)..(1313224) OTHER INFORMATION: n equals a, NAME/KEY: misc feature LOCATION: (871619)..(871619) OTHER INFORMATION: n equals NAME/KEY: misc_feature PCT-US03-13853-2534/c TYPE: DNA FEATURE: FEATURE: FEATURE: ઠે g ద ò ð ઠ

g

a

ઠે

```
by Means of Assessing the Methylation Status of Genes Associated With DNA TRanscription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLO01464
CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1028 TTACTTAATTAATACTAAATATAATACTTCAAACTCTTAAAAACTAATTACTCCTAA 3969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3968 AATAAAAAATACTTAATATAAAAACTACTATTTTTAAATTAAATACAACTTAATCTTATT 3909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67 GITTIACCITCAGAAGAATAITIAGITICACICAGGITTITICAAAGCIACGCIGICCCCC 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127 AAAAAACGAAACAAAAAAAAAAAAACCATTTTTAAGAGTTGATGGCTACTCATTTGATC 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 TAAGTTGTTTCAGGCATAAAATTTGAAATTAATGAGGCTCCATGATATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-240-453-180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 31312;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
Diagnosis of Diseases Associated with DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 41; DB 9; Length 5518;
Pred. No. 3.6;
0; Mismatches 90; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 39.6; DB 10;
Pred. No. 7.3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                            FILE KREFAKENET: 3013-1009
CURRENT FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: UST/LED01/03973
PRIOR FILING DATE: 2001-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 258418
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 52707
LENGTH: 31312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 52707, Application US/60465241
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: n = A,T,C or G
US-60-465-241-52707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 51.4%;
Matches 95; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 58.5%;
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: CARGILL, Michele
TITLE OF INVENTION: Diagnos
TITLE OF INVENTION: Transc
TITLE OF INVENTION: by Mea
TITLE OF INVENTION: with D
FILE REFERENCE: 5013.1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(31312)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3908 TAACT 3904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 187 TGCCT 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       // LOCATION: (1)...(763446)
// OTHER INFORMATION: n = A,T,C or G, or insertion/deletion polymorphism (see Tables 1-
US-60-470-166-8943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: GRUPE, Andrew
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: ALZHEIMER'S DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REPERENCE: CLO01464
CURRENT APPLICATION NUMBER: US/60/470,166
CURRENT FILING DATE: 2003-05-09
NUMBER OF SEQ ID NOS: 68617
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8943
LENGTH: 763446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             102742 TCCATATTTCTTTTTTTTTAAATTTTTGTTGGTTCATAAGCTGTAGATCATATTCTGTTC 102801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102622 CGTTTAATTCGTTTATACTTAATATACTCACTGATACAATATGTGAGTTTTTTCTGCTGT 102681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               102682 TTTATTTTGGGTTTCTTTGCTCCTCTTTCCCCCTTTCCTGTCTTATATTAAAGGAATTGT 102741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141 AACAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTG 200
                                                                                                                                                                                                                                                                                                               537 TTGACATACATTTTGATGTATGTAGTTAGGCTATACAGAATGTACAAACCAAAGCTGTAT 478
                                                                                                                                                                                                                                                                                                                                                                      477 CAATAATACATAGGTTTTTCAAAATTAGGTTTCAATAAAGAATACAGAGAAAGGAAAAT 418
                                                                                                                                                                                                                                                        29 TTGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAAGAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 CATAAAATTTGAAATAAAATTATGAGGCTCCATGATATGCTATATTGGTTTTTACCTTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81 AGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAAACAA
                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 763446;
                                                                                                                                                                                                 ö
                                                                                                                                             DB 1; Length 538;
                                                                                                                                                                                                 68; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    417 AACCACATCCAACAACTCAGAACTTCTAA 387
                                                                                                                                          Score 42.2; DB
Pred. No. 2;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149 AACAACCTTTTTAAGAGTTGATGGCTACTCA 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 41.8; DE Pred. No. 2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102802 TCCTAGTGATTACTCTTTTTTTTT 102826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201 AATCAATTAGGAATTTTTTTTT 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 8943, Application US/60470166 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 180, Application US/10240453; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18.6%;
50.2%;
                                                                                                                                          Query Match
Best Local Similarity 55.0%;
Matches 83; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: CARGILL, Michele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 18.6
Best Local Similarity 50.2
Matches 103; Conservative
     ORGANISM: Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
                                                         OTHER INFORMATION:
PCT-US03-13853-2534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
US-10-240-453-180/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
US-60-470-166-8943
```

g

ઠે

g

유

ઠે

ઠે

ઠે g ò 셤

```
Sequence 84536, Application US/60466412
GENERAL INFORMATION:
APPLICANT: CARGILL,
APPLICANT: CARGILL,
APPLICANT: IAKOUBOVA, Olga
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLO01466
CURRENT APPLICATION NUMBER: US/60/466,412
CURRENT FILING DATE: 2003-64-30
NUMBER OF SEQ ID NOS: 429241
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 84536
LENGTH: 343317
                                                                                                                                                                                                                         Sequence 51757, Application US/60465241

GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, AM
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REPERENCE: CLO01468
CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SEQ ID NO 51757
LENGTH: 343317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      185157 TTATTTCTTTGAGGTAAACAATTTCAAAGAATAATGTGATTTTAATGTAATAATTTATAA 185216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7 TAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67 GTTTTACCTTCAGAAGAATATTTAGT--TTCACTCAGGTTTTTCAAAGCTACGCTGTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 343317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 343317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                   Query Match 17.2%; Score 38.6; DB 10; Best Local Similarity 61.1%; Pred. No. 12; Matches 80; Conservative 0; Mismatches 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 38.6; I
Pred. No. 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: misc_feature
LOCATION: (1) ... (343317)
CTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: misc_feature
COCATION: (1)...(343317)
COTHER INFORMATION: n = A,T,C or
US-60-465-241-51757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 61.1%;
Matches 80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185277 CCATATATCAA 185287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125 CCAAAAAACGA 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                RESULT 10
US-60-465-241-51757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-60-466-412-84536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         윱
       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ્ઠે
                                                                                                                                                                                                                                                                                                                                                                            Sequence 86559, Application US/60466412
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: CARGILL, Michele
APPLICANT: IAKOUBOVA, Olga
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001466
CURRENT APPLICATION NUMBER: US/60/466,412
CURRENT FILING DATE: 2003-04-30
NUMBER OF SEQ ID NOS: 429241
SEQ ID NO 86559
                                                               29982 GACCACTGACTATTTCAGTTTCCTATTCTTGAGCAAGTTGTGGTAGTTGGTGTCT 30039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29982 GACCACTGACTATTCAGTTTCCTATTCTTGTTGAGCAAGTTGTGGTAGTTGGTGTCT 30039
74 CITCAGAAGAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAAC 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 759 ctraciacitacia de consecencio de consecuencia de consecuen
                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: TOTYAMA
APPLICANT: TOTYAMA
TITLE OF INVENTION: COMPOSITION AND METHOD FOR NERVE RECENERATION
FILE REFERENCE: 59150-8023
CURRENT APPLICATION NUMBER: US/10/427,741
CURRENT APPLICATION NUMBER: US/203-92923
PRIOR APPLICATION NUMBER: JP 2003-92923
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PATENTION OF SEQ ID NOS: 25
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10; Length 31312;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 39.2; DB 8;
Pred. No. 8.9;
0; Mismatches 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
17.6%; Score 39.6; Di
Best Local Similarity 58.5%; Pred. No. 7.3;
Matches 69; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) LOCATION: (1)...(31312)
; OTHER INFORMATION: n = A,T,C or G
US-60-466-412-86559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
Best Local Similarity 62.0%;
Matches 62; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: MUS musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 60615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-427-741-9
```

g

ઠે 요

ò

ò g

셤 ò g

```
61750 ATGTTGAGCATTGTATATTTTATTATTTTAATTGTCTTCCATGTCATTTTATTAGTA 61691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6268
                                                                                                                                                                                                                                                                                                                                                                                                                               6267 TAAATAAAATCAAATATACTCAATTCTAACTAATTCTCCGCTCTCTCAAATAACCTTA 6208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                             5387 AAAAAACTTAAAAAAAAAATTTTAAAAATAATTAAAATAAATAAAACTTTTTCCTTTAAAA 6328
                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        68 TITIACCTICAGAAGAATAITIAGTITCACTCAGGTITITCAAAGCTACGCTGTCCCCCA 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 AAGTTGTTTCAGGCATAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTGG
                                                                                                                                                                                                                                                                                                                                      142 ACAAAAAAACAACCTTTTTAAGAGTTGATGGCTACTCATTTGATCTGCCTCCTCTGCTGA
                                                                                                                                                                                                                                                                                         82 GAATATTTAGTTTCACTCAGGTTTTTCAAAGCTACGCTGTCCCCCAAAAAACGAAACAAA
                                                                                                                                                                                                  22 ATAAAATTIGAAATAAATTATGAGGCTCCATGATATGCTATATTGGTTTTACCTTCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Morris, David
APPLICANT: Engelhard, Eric
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER
FILE REFERENCE: A-71-249/RMS/DCF
CURRENT FILING DATE: 2002-12-26
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR APPLICATION NUMBER: US 09/798,586
PRIOR PILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: US 09/798,586
PRIOR PILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 1613
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  128 AAAAACGAAACAAAAAAAAAAAAACAACCTTTTTAAGAGTTGATGGCTAC 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 96588;
                                                                                                         DB 9; Length 12393; 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                        0; Mismatches 100; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 37.8; DB
Pred. No. 18;
0; Mismatches
                                                                                                           Score 38;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MS-09-837-604A-71071/c

: Sequence 71071, Application US/09837604A
                                              g or c or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1544, Application PC/TUS0241414 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Byrum, Joseph R.
APPLICANT: La Rosa, Thomas J.
APPLICANT: Shukla, Hridayabhiranjan
APPLICANT: De La Pena, Robert C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6207 AACAATTTCTATCATTT 6190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              202 ATCAATTAGGAATTTTT 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16.8%;
51.5%;
                                                                                                           16.9%;
49.5%;
                       LOCATION: 9300, 9362
OTHER INFORMATION: n is a or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 51.5'
Matches 87; Conservative
                                                                                                       Query Match
Best Local Similarity 49.5'
Matches 98; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T-US02-41414-1544/c
NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCT-US02-41414-1544
                                                     ; OTHER INFORMAT:
US-10-311-455-1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 96588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: OLEK, Alexander
APPLICANT: PIEDENBROCK, Christian
APPLICANT: PIEDENBROCK, Christian
APPLICANT: BEBLIN, Kurt
TITLE OF INVENTION: Cytosine methylation
FILE REFERENCE: 5013.1014
CURRENT PELLORATION CONSTRUCTION
CURRENT PELLORATION
CURRENT FILING DATE: 2002-12-16
                                                                                                                                                                                                                                                                                                                                                                                                            Ü
                                                                                                                                                                                                                                                                                                                          Sequence 55, Application US/09948128

GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig
TITLE OF INVENTION:
TITLE OF INVENTION:
CURRENT APPLICATION OF SINGLE NUCLECTION OF STREED FOLYMORPHISM (SNPs) LOCATED ON (TITLE OF INVENTION: COLLECTION OF DETECTION, AND USES THEREOF FILE REFERENCE: CLO01294
CURRENT APPLICATION NUMBER: US/09/948,128
CURRENT FILING DATE: 2001-09-07
SEQ ID NO 55
LENGTH: 15105345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             185157 TTATTTCTTTGAGGTAAACAATTTCAAAGAAATAATGTGATTTAATGTAATAATTTATAA 185216
                                                                                                                                 185217 ATCTGAAAGACTATTTTAGAATCTTTAGCTCATTATTTTTAAGATATGCTATCAG 185276
                                                                                           67 GTTTTACCTTCAGAAGAATATTTAGT--TTCACTCAGGTTTTTCAAAGCTACGCTGTCCC 124
  7 TAAGTTGTTTCAGGCATAAAATTTGAAATAAATTATGAGGCTCCATGATATGCTATATTG 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 15105345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 38.6; DB; Pred. No. 11; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6035157 Arcicircaacacircacaccr 6035133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PCT/EP01/07537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            153 ACCTTTTTAAGAGTTGATGGCTACT 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 2424
SEQ ID NO 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 2001-07-02
APPLICATION NUMBER: DE 10032529.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1236, Application US/10311455
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           '; NAME/KEY: misc_feature
| LOCATION: (1)...(15105345)
| OTHER INFORMATION: n = A,T,C or G
US-09-948-128-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 65.9%;
Matches 56; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                            185277 CCATATATCAA 185287
                                                                                                                                                                               125 CCAAAAAACGA 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-311-455-1236/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: HUMAN
                                                                                                                                                                                                                                                                                              RESULT 12
US-09-948-128-55/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
```

셤

ઢ

ઠે

```
r: Bougri, Olegs
INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
16.7%; Score 37.6; DB 7; Length 522;
Best Local Similarity 55.3%; Pred. No. 23;
Matches 73; Conservative 0; Mismatches 59; Indels
                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Oryza sativa nipponbare
FEATURE:
LOCATION: (1)..(522)
OTHER INFORMATION: unsure at all n locations
FEATURE:
FEATURE:
OTHER INFORMATION: Clone ID: LIB3598-060-Q1-N1-F10
                                                  FITLE OF INVENTION: Plants
FILE REFERENCE: 38-21 (51892) B
CURRENT APPLICATION NUMBER: US/09/837,604A
CURRENT FILING DATE: 2001-04-18
FRIOR APPLICATION NUMBER: US 60/197,872
FRIOR FILING DATE: 2000-04-19
NUMBER OF SEQ 1D NOS: 81288
SEQ 1D NO 71071
LENGTH: 522
```

Search completed: June 9, 2003, 11:23:37 Job time : 3581 secs

142 ACAAAAAAACAA 153 | | | | | | | | | | | 30 AAAAAAAAAA 19

ò

ያ ዓ

g

THIS PAGE BLANK (USPTO)